INQUIRY, FORMS, AND SUBSTANCES

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INQUIRY, FORMS, AND SUBSTANCES

A STUDY IN PLATO'S METAPHYSICS AND EPISTEMOLOGY

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For my mother, Louise Orlando (12/8/36-11/2/89).
Thirty-one years is not long enough to know a person like her.

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1

INTRODUCTION

i. Introductory remarks

Plato, but not Socrates, concluded that the Forms are substances.[1] Whether the Forms are substances is not an issue that Socrates had in mind. He did not deny it, but neither did he affirm it. If Socrates were asked a series of questions designed to determine whether he believed that the Forms are substances, he would admit that he had no opinion about this philosophical issue. Unlike Plato, Socrates was not a metaphysician. The same, of course, would not have always been true of Plato. Unlike Socrates, he was a metaphysician. At some point in his career, and at least by the time of the *Phaedo* and the *Republic*, Plato did what Socrates never thought to do. Plato considered the question and concluded that the Forms are substances.

Although this development occurred more than two thousand years ago, time has not eclipsed its importance. It is one of the most seminal events in the history of the philosophy. With his defense of Socrates's method of intellectual inquiry, and the development of his Theory of Forms, Plato caused a now familiar cluster of metaphysical and epistemological issues to become central to philosophy.

Many Platonic scholars have tried to understand the origin of the Theory of Forms, and although some of their attempted explanations are intriguing, none has been compelling. None has provided a reading of the dialogues that is true both to the corpus and to Plato's historical context. Some scholars may try to dispute this assessment, but the lack of a standard explanation in the text books tells the score. Nearly every introductory text in the history of ancient philosophy records that Plato concluded that the Forms are substances and starting-points, but few, if any, offer any real explanation for this development. The reason for this omission is not that the topic is too advanced. It is that there is little agreement among scholars about why Plato concluded that

the Forms are substances. Despite the many attempted explanations, this scholarly issue remains unresolved.[2]

My intention is to settle the debate. The Theory of Forms is the theory that certain essences exist and that they exist as substances, i.e., ontological starting-points. I argue that each of these conjuncts becomes part of the theory as Plato attempts to validate the leading assumptions in the method of inquiry that Socrates uses in his search for knowledge about matters involving justice, beauty, and other such properties. Plato agreed with Socrates on the priority of definition in the search for knowledge, and he decided that this epistemological fact imposes significant and far reaching constraints on how reality can be. Plato came to believe that reality must contain Forms to be the essences of justice, beauty, etc., and because he was unsatisfied with the ontologies that he associated with the sophists and the Ionian natural scientists, he came to believe that these Forms must exist in reality as substances and starting-points. Plato thought that the possibility of knowledge entailed that reality could be no other way.

My explanation of the development of Plato's thought has several virtues that make it more probable than its predecessors. It fits well with Plato's place in history, particularly with his relation to the Ionian natural scientists, Socrates, and the sophists. It makes Plato's thought about the Forms be part of a philosophical and intellectual history that begins in the pre-Socratic period, extends through Socrates and the sophists, and continues into the twentieth century. My explanation does not come to grief over the text. It fits well with the development of Plato's thought from the early to the late dialogues. Unlike its predecessors, my explanation provides for an illuminating and unified reading of three passages that scholars have long recognized as keys to the development of Plato's thought, but which have proved stubbornly resistant to interpretation, both individually and as a group. They are *Phaedo* 95e-102b, *Republic* 473d-480a, and *Timaeus* 48b-52d. These passages stand as a veritable gauntlet that has been the ruin of previous attempts to explain the origin of Plato's Theory of Forms.

ii. Assumptions

I approach the evidence armed with three substantive assumptions. The first, however, is not especially controversial. It is that Plato came to his belief about Forms against a background of intellectual and political events. Plato was a man. He lived in an historical context, and no explanation that ignores this fact can be very illuminating.

The second assumption is more controversial. It is that Plato had reasons for believing that the Forms are substances. He did not just find himself with this belief. Nor did he come to have it in virtue of some unconscious influence. Plato adopted his belief in response to a philosophical problem. It was the conclusion of an argument.

The third assumption is still more controversial. It is that Plato's reasons for this conclusion were not simpleminded mistakes. Twentieth century philosophers might not accept his reasons, but the difference of opinion would be substantive. Plato is one of the greatest philosophers in the history of the subject. No explanation in terms of trivial confusions is likely to be correct.[3]

The second and third assumptions should be uncontroversial, but they actually run contrary to much of the received opinion about Plato. Both inside and outside the field of Platonic studies, many twentieth century philosophers are content to suppose that Plato fell into his belief in virtue of some simple confusion. This trend may have its roots in Aristotle. He had little patience for the Theory of Forms. He dismisses it as τερετίσματα (*Posterior Analytics* 83a33), the sounds of those who vocalize without expressing propositions.

The situation, unfortunately, has not improved with age. No sympathy exists for the Theory of Forms among philosophers in the analytic tradition that stems from Wittgenstein. These philosophers suggest that Plato fell into his belief because he was held blindly in the grip of certain mistaken views about grammar. According to this explanation, Plato was misled by surface grammatical structure. He failed to appreciate that abstract nouns are nominalized predicates. This prevented him from understanding that formal truths about beauty, justice, etc., are determined by linguistic practices, not by metaphysical objects that exist in some special compartment of reality.

I am convinced that both the Platonic corpus and its historical context are inconsistent with this Wittgensteinian explanation. Indeed, I am convinced that the corpus and its historical context are clearly inconsistent with all such patronizing attempts to explain the development of his thought, but instead of simply presenting the evidence to prove this inconsistency, perhaps the only really effective way to refute these explanations is to establish a better one in their place. This is just what I intend to do. I think that more can be said for Plato and his Theory of Forms than many scholars have been willing to allow. If I am correct, much of the received wisdom about Plato distorts both the development of his thought and his place in the history of philosophy.

iii. Organization

My discussion proceeds according to the order dictated by the traditional arrangement of the Platonic dialogues. I begin with an analysis of the assumptions that inform Socrates's search for definitions in the early dialogues, and I end with an interpretation of the passages in the *Timaeus* in which Plato has his character discuss the Forms, the Receptacle, and the four kinds of stuff. As I proceed, I defend my readings against some of the alternative positions in the secondary literature. Because this literature is so very extensive, I can only defend my readings against what I take to be the most important and influential alternative interpretations.

This restriction does little to ease my burden. My explanation of the development of Plato's thought is contrary to the claims of many distinguished scholars. The interpretations that I argue against belong to many of the leaders in the field. They include Julia Annas, Harold Cherniss, F. M. Cornford, Michael Frede, Norman Gulley, Terry Irwin, G. E. L. Owen, Terry Penner, and Gregory Vlastos.

This first chapter constitutes an introduction to the most important points that I try to establish in subsequent chapters. In section iv, I discuss Socrates's influence and show why it is insufficient to explain the genesis of Plato's belief that the Forms are substances. I present the textual evidence in chapter 2. In sections v, vi, vii, and viii, I

present my explanation of this development in Plato's thought. In chapters 2, 3, 4, and 5, I develop this interpretation, present textual evidence, and argue against alternative interpretations. I conclude in section ix with a discussion of Plato's place in history and the importance of his Theory of Forms in the history of philosophy.

iv. Socrates's influence

Socrates is the most important figure in Plato's historical context. This fact is not in doubt, but there is much less agreement on the content of Socrates's influence. I argue that his appeal to Forms in his search for knowledge about matters involving beauty, justice, etc., is a crucial part of the background against which Plato's thought develops.

Socrates's influence is evident from the way he figures as a character in the Platonic dialogues. In the early definitional dialogues, he appeals to the Forms to help account for the possibility of knowledge with respect to certain questions that interest him and his interlocutors. At the end of book I of the *Republic*, e.g., he suggests that inquirers who seek knowledge about such matters must follow a "method" (μέθοδος). He suggests, firstly, that they must know the answer to the "What is justice?" question before they can come to know the answers to the questions that prompt the inquiry, such as whether a given "city" (πόλις) is just. Socrates suggests, secondly, that there is an answer for him and his interlocutors to know because there is a Form to be the essence of justice.[4]

Plato agreed with Socrates. With respect to matters involving justice, beauty, etc., Plato agreed that knowledge is not possible unless definitional knowledge is possible. This principle informs the so-called "priority of definition."[5] Plato also agreed that the Forms help make definitional knowledge possible. This principle has not attracted enough attention to garner a name, but I shall call it the "priority of Form." Plato agreed that the Forms insure that there are definitional truths to be possible objects of knowledge.

Socrates believed in Forms, but he was no metaphysician.[6] He assumed that the Form the F itself is specified in answer to the "What is F?" question, and he assumed that this definitional answer is part of

the justification necessary for knowledge about matters involving F-ness. As for whether the Forms themselves require explanation, or are starting-points in ontology, he had no opinion and did not consider the question. This philosophical issue was not one of his concerns. He was not concerned with how Forms fit into a conception of reality that accounts for the possibility of knowledge. Socrates sought knowledge about matters involving justice, beauty, and the other properties that figure prominently in the early dialogues, but he was simply not concerned to argue about how Forms fit into reality.[7]

Socrates's influence explains why Plato supposed that the Forms exist, but it does not explain why he concluded that they exist as substances. Socrates did not have a view on how certain properties constitute essences. His retreat to Forms was in no important way different from the ordinary retreat to definitional truths. If someone were to retreat to such truths to explain why something with such-and-such features counts, say, as beautiful, he would not necessarily believe that these truths are ground in metaphysical objects that exist in some special compartment of reality. Nor would he necessarily believe that they are ground in the reality of the sensible world and the ways that language users choose to use their words. With respect to the Forms, Socrates never ventured beyond this unsophisticated position. Plato did. By the time of the two great middle dialogues, the *Phaedo* and the *Republic*, he had an ontological theory about Forms. He believed, to borrow Quine's famous words, that the Forms "have being independently of the mind," that "the mind may discover them but cannot create them" ([1948], p. 14).[8] Once Plato came to believe that the Forms exist as substances, he had done something much more than take over the use of Forms that he found in the way that Socrates searched for knowledge.

In terms of Carnap's well known distinction between "internal" and "external" questions ([1950]), Plato came to believe that the assertion that there are Forms is an answer to an external question. The grammatical resources in ordinary English provide for the nominalization of predicates, and thus provide speakers with the means to talk about the properties that predicates express. The grammatical resources in ordinary English also provide for existential quantification,

and thus provide speakers with the means to assert the existence of what they talk about. To assert that the essence of justice exists, therefore, is not necessarily to assert a proposition with metaphysical import. The proposition can be a trivial consequence of nothing more than an acceptable definition of justice and the grammatical resources in ordinary English. When Plato concluded that the Forms exist as substances, he did not suppose that they merely have this "internal" existence. He accepted a proposition with radical metaphysical import. He concluded that the Forms are "really real" (ὄντως ὄν), that they are part of a reality that is "external" to the sensible world and to the ways that language users choose to use their words. Plato, but not Socrates, believed that the Forms exist in a third realm.[9]

v. Plato's tribute to Socrates

I argue that part of the explanation for this development in Plato's thought is that he understood Socrates's practice in his search for knowledge as part of a reaction to the practices of the Ionian natural scientists. Socrates's new way of searching for knowledge resulted in a significantly changed conception of intellectual inquiry, and it helped to redefine the practice of philosophy in the ancient world.

The Greek adjective φιλόσοφος occurs rarely in the surviving pre-Platonic texts.[10] Perhaps the two best known occurrences are in Herodotus's *Histories* I.30.2 and in Pericles's Funeral Speech in Thucydides's *Histories* II.40, where they mean roughly "lover of knowledge."[11] The intellectuals who could go by this description were primarily those who sought the kind of "wisdom" (σοφία) that the ancients called 'inquiry into nature' (περὶ φύσεως ἱστορίαν)[12] and that can be called 'natural science' as long one keeps firmly in mind that the interests of these pre-Socratic intellectuals were extremely broad and included meaning, knowledge, and other such matters.[13]

Anaxagoras was perhaps the most prominent such "philosopher" residing in fifth century Athens, and Socrates may have been an early member of Anaxagoras's school. Under the patronage of Pericles, sometime after 480 BC, Anaxagoras established a school in Athens and remained there until about 430 BC. This was the first such school in

Athens, and Socrates may have been familiar with its teachings. The character says in the *Apology* that the many who belittle him say that "he busies himself studying things in the sky and below the earth" (19b4-5),[14] and Meletus, one of his accusers, charges him with beliefs that Anaxagoras was known to hold (26d1-9).

Socrates, however, soon gave up this sort of inquiry, if he ever engaged in it at all. As the early definitional dialogues clearly show, and Aristotle reports in the *Metaphysics*, Socrates soon "was busying himself with ethical matters, neglecting the world of nature as a whole, seeking the universal in these ethical matters, and fixed thought for the first time on definitions" (987b1-4). Whether he ignored his predecessors, or argued against them, Socrates's turn to the Forms in his search for knowledge was the centerpiece of a revolution that reshaped intellectual inquiry in the ancient world.[15]

The most important evidence for understanding this revolution is Socrates's intellectual autobiography in the *Phaedo*, but to appreciate the full import of this passage, both for the development of Plato's thought and for the place of Plato's thought in the history of philosophy, one must depart from the orthodox interpretation. In the autobiography, as I read this passage, Plato recounts the revolution and pays tribute to Socrates for his contribution. Furthermore, and more importantly for Platonic scholarship, Plato shows himself to conclude that the Forms are substances. In his effort to entrench the shift in perspective and to validate the new conception of inquiry, he marks the natural scientists's method as "pseudo-philosophical" and part of a conception of reality that is inconsistent with knowledge. On this conception of reality, the Forms are not substances. The only substances are sensible objects, such as portions of fire, water, and the other stuffs that are traditional in Greek cosmology. Plato marks certain assumptions in Socrates's method as "philosophical" and part of a conception of reality that is consistent with knowledge.[16] This conception is the Platonic conception of reality. The Forms are among its starting-points. Plato supposes that if the Forms of justice, beauty, etc., do not exist as substances, but either do not exist at all or must supervene on more basic objects, then there are no grounds for the

respective definitional truths that are necessary for the possibility of knowledge about matters involving these properties.

The orthodox interpretation of Socrates's autobiography, at least among contemporary English speaking historians in the analytic tradition, is the one that Gregory Vlastos offers in his extremely influential and now classic 1969 paper "Reasons and Causes in the *Phaedo*." Although I am in agreement with many points in Vlastos's paper, his interpretation is significantly different from the one that I have outlined and believe is true. If Vlastos is correct, Plato discusses the natural scientists in order to help his readers understand what Aristotle was able to later express more clearly with his well known Doctrine of the Four Causes. Vlastos argues that Plato maintains that the Greek noun αἰτία and its cognates apply to different and non-competing kinds of causes, including physical and logical causes, and that these different kinds of causes are appropriate for different kinds of explanation. According to Vlastos, Plato does not choose Socrates and his method over the natural scientists and their method; rather, like Aristotle after him, he tries to make room for both kinds of intellectual inquiry. Vlastos argues that Plato realizes, and is trying to help his readers to realize, that although Socrates and the natural scientists both use forms of the noun αἰτία to describe the objects of their inquiry, they are concerned with different kinds of causes and that each such kind is acceptable in its own domain.

The evidence is not completely straightforward, but it is clear enough to show that Vlastos is mistaken. In trying to see Plato as anticipating Aristotle's Doctrine of the Four Causes, Vlastos misunderstands the development of Plato's thought. He removes Plato from his rightful place in the history of the intellectual reaction to the Ionian cosmological speculations and their novel conceptions of reality. This, in turn, causes Vlastos to misread Socrates's autobiography and to leave his readers with absolutely no understanding of Plato's reasons for concluding that the Forms are substances.

Socrates may have argued against the natural scientists and consciously turned against them, or he may have simply taken no notice of them, but the character in the *Phaedo* supplies an argument for rejecting the explanations that fall out the natural scientists's method of

inquiry. With respect to matters involving justice, beauty, etc., he supposes that if the explanations of the natural scientists were accepted in the place of his explanations in terms of the definitional content of Forms, knowledge would be impossible because there would be no truths to know. The character supposes that if the natural scientists's way of searching for knowledge were accepted as the philosophical, i.e., "scientific" method of intellectual inquiry, then one would have to accept a conception of reality according to which the essences of justice, etc., either would not exist or would have their source in something other than Forms that exist "themselves according to themselves" (*αὐτὰ καθ' αὑτά*), and he rejects both alternatives. On matters involving justice, beauty, etc., Plato agreed with Socrates that knowledge is possible only if the respective definitional knowledge is possible. Further, in reflecting on how the essences fit into reality, Plato came to believe that Socrates showed good philosophical sense not to deny that they are starting-points. He came to believe that unless the essences were starting-points there would be no definitional truths to be possible objects of knowledge. Plato came to believe that definitional truths about justice, beauty, etc., have their objective ground in a third realm of Forms.

Contrary to Vlastos's interpretation, Socrates's autobiography is a record of a clash between different methods of inquiry and their corresponding conceptions of reality. Plato does not attempt to make them live in peace. He does not suppose that the natural scientists's explanations are unacceptable as logical explanations, but are acceptable as physical explanations. He outright rejects the explanations that fall out of their method of inquiry. He supposes that this method is part of a conception of reality in which the essences do not exist as starting-points, and he believes that in this case there can be no knowledge about justice and the other properties that Socrates asks about. Plato maintains that there can be such knowledge, he accepts the leading assumptions in the method that Socrates uses to pursue this knowledge, and he believes that these assumptions are inconsistent with a conception of reality in which the essences do not exist as substances. In trying to see Plato as anticipating Aristotle, Vlastos obscures these important truths.

vi. Philosophers against lovers of spectacles

I argue that in the *Republic*, the other great dialogue from the middle period, Plato again shows himself to believe that the Forms are substances. Indeed, he argues for this conclusion in his discussion of the philosopher and the lover of spectacles in book V of the *Republic*. This argument is parallel to the earlier argument against the Ionian natural scientists, but the opponents are now much more prominent in fifth century Athens. As in the *Phaedo*, so also in the *Republic*, the argument takes place against a background in which Socrates reacts to his predecessors, but now the reaction is to opponents that Plato characterizes as lovers of "opinion," or "fancy" (δόξα), as opposed "wisdom" (σοφία). This characterization gives them a philosophical position like the one that he associates with the sophists.

In book V, after he insists that only the philosopher is fit to rule, Plato distinguishes the philosopher from his competitor, the lover of opinions and spectacles, in terms of their respective beliefs about the Forms. The philosopher accepts the ontology and explanation in terms of the definitional content of Forms that Socrates defends in the *Phaedo*. The lover of spectacles admits into his ontology the many just things, beautiful things, etc., but he rejects the philosopher's way of fitting the respective essences into reality. Instead of accepting the Platonic claim that essences exist as substances, he insists that they must find their place among "the many conventions (νόμιμα) of the many." Plato is dead set against this conception of reality. He argues that the lover of spectacles accepts an ontology that is inconsistent with the possibility of knowledge about justice, beauty, and other such matters. Plato believes that, if the lover of spectacles were right about reality, then for the properties that Socrates uses his "What is F?" question to ask about, there would be no fact of the matter about what features a given thing must have to be F.

The lover of spectacles holds a metaphysical and epistemological position similar to the one that Plato associates with the sophists. He takes the sophists, especially the younger generation of sophists, to advocate a conception of reality in which claims about justice, beauty, etc., are part of a subjective and merely human perspective. Plato

rejects this conception of reality because he believes that it wrongly removes essences from objective reality and reduces them to nothing more than the fancies of individuals and groups. He maintains that if the many *νόμιμα* about justice, e.g., were accepted in place of the one Form the just itself that exists "itself according to itself" (*αὐτὸ καθ' αὑτό*), there would then be nothing that justice is, because in reality justice would have no essence, and although individuals could fancy themselves as speaking truths about matters involving justice, no statement that predicates justice would have a truth value, and political knowledge would therefore be impossible.[17]

This reading should seem natural, perhaps even beyond dispute, but many scholars actually favor a different interpretation. G. E. L. Owen first put this interpretation forward in his 1957 paper "A Proof in the Περι Ιδεων." He argues that Plato came to believe that the Forms exist as both samples and standards. Plato came to this conclusion, according to Owen, because he was impressed that disagreement over whether, e.g., something is a finger, or a portion of fire, is resolved by reference to "unambiguous samples" of fire and fingers, but he found that the "world which contains unambiguous samples of fire and fingers contains no comparable cases of goodness or similarity..." (p. 109). On Owen's interpretation, the philosopher and the lover of spectacles agree on how to resolve disagreement about matters involving fingers, fire, etc., but they disagree on how to resolve disagreement about matters involving the properties that Socrates uses his "What is F?" question to ask about. The lover of spectacles is content to try to make certain ordinary sensible objects of experience function as "unambiguous Paradigms," but the philosopher insists that only intelligible objects, not the ordinary sensible objects of experience, can function as such paradigms (p. 109). He insists that if there were only the ordinary sensible objects, then for the properties that Socrates asks about, no "unambiguous Paradigms" would exist, and consequently everything would be both F and not-F. To avoid this result, and to allow for knowledge, the philosopher supposes that there are Forms that exist as "unambiguous Paradigms."

Although perhaps Plato could argue in the way that Owen claims, the text provides insufficient evidence to conclude that he actually does

argue this way. Owen is quite correct that the clash between the philosopher and the lover of spectacles is a clash between different conceptions of reality. On Owen's interpretation, as on mine, Plato is concerned with the ontology that is necessary for the possibility of knowledge about matters involving justice, beauty, etc., but Owen is wrong to suppose that Plato accepted the very implausible proposition that the Forms are special instances of justice, beauty, and the other properties that Socrates asks about.

Owen argues that Plato accepts this implausible proposition because he wants to extend a certain semantics for (Greek counterparts of) the predicates 'is a finger,' 'is a portion of fire,' etc., to cover the predicates that occur in Socrates's "What is F?" question. The middle dialogues, however, reveal a very different proximate starting-point for the Theory of Forms. Plato shows no interest in the semantics for (Greek counterparts of) 'is a finger' and other such predicates. His interest is in Socrates's search for definitions and its place in the search for knowledge. To validate the leading assumptions in Socrates's method of inquiry, Plato struggles to incorporate Forms into reality in a way that is consistent with the possibility of knowledge.

In principle, of course, Plato could come to believe that the best way to complete this project is to make the Forms exist as "unambiguous Paradigms," but given that he is sophisticated enough to take on this philosophical problem, I doubt that he could really accept the rather bizarre solution that Owen claims for him. Only extremely clear and compelling evidence could show that Plato concluded that the Forms are special instances of justice, beauty, etc., and neither in the discussion in book V of the *Republic*, nor, for that matter, in any discussion in any place in the entire Platonic corpus, is there any such evidence. The Theory of Forms is not without problems, but Owen saddles Plato with more problems than he deserves.[18]

This unsympathetic approach to Plato is manifest in subsequent endorsements of the main lines of Owen's interpretation. In his important 1965 and 1966 papers "Degrees of Reality in Plato" and "Metaphysical Paradox," although he gives him a different motivation, Vlastos agrees that Plato came to believe in a third realm of Forms that are both samples and standards. Vlastos holds that Plato "misconstrued

universals as a higher grade of particulars" ([1965], p. 75). On his interpretation, the lover of spectacles is content to try to extract answers to the "What is F?" question from ordinary sensible objects of experience that are F. Plato does not reject this procedure, but he insists that it works only on intelligible objects. In locating the source of definitions in sensible objects, the lover of spectacles leaves himself no way to avoid supposing that everything is both F and not-F. The philosopher does not have this problem because he grounds definitional truths in intelligibles. He supposes that the answers to Socrates's "What is F?" question are in Forms that exist in a third realm and that are both samples and standards. Unlike the ordinary sensible objects of experience, the Forms somehow wear their essences on their sleeves. The separately existing soul can somehow see that the Form the F itself is F, can see that it has other properties, and can conclude that these properties are the essence of F-ness. When it is incarnated in the body, if it is a philosopher and does not succumb to the body's many lusts and desires, the soul can recollect what it previously knew.

In his variation on Owen's interpretation, Terry Irwin does not maintain that Plato came to believe in a third realm of Forms that exist as both samples and standards, but his interpretation is hardly generous. He maintains that the Theory of Forms has its origin in a straightforward conflation. On his interpretation, the lover of spectacles is content to try to define justice, beauty, etc., in terms of sensible properties. Plato supposes, according to Irwin, that lover of spectacles makes a terrible mistake. He supposes that the lover of spectacles must conclude that justice, beauty, etc., and their opposites are reduced to the same sensible properties. He supposes, e.g., that the lover of spectacles must conclude that beauty both is and is not a matter of bright coloring. To avoid such unpalatable consequences, Plato has the philosopher help himself to non-sensible properties to define justice, beauty, and the other properties that Socrates asks about. Although this debate between the philosopher and the lover of spectacles is not over whether the Forms are substances, Irwin maintains that Plato nevertheless invalidly jumps to this metaphysical conclusion. The reason, according to Irwin, is that Plato conflates two very different propositions. Irwin maintains that Plato does not appreciate the

difference between the proposition that justice, beauty, etc., are not definable in terms of sensible properties and the proposition that they exist as substances and separately from sensible objects.

Plato was probably wrong to conclude that the Forms are substances, but I see no good reason to suppose that he made the mistakes that Vlastos and Irwin claim for him. In book V of the *Republic*, Plato struggles to incorporate essences into reality. The lover of spectacles tries to understand claims about justice, beauty, etc., in terms of nothing more than the "many conventions of the many." The philosopher opposes the lover of spectacles. He insists that if the "many conventions of the many" about F-ness were to replace the one Form the F itself, then instead of the one objective definitional truth that had its source in this Form, there would be many subjective "opinions, or "fancies," that masquerade as definitional truths. He insists that if, instead of the one definitional truth, there were these many ersatz definitional truths, each specifying different properties as the essence of F-ness, then everything would be both F and not-F, and consequently knowledge would be impossible. He insists that the lover of spectacles accepts a conception of reality that is inconsistent with the possibility of political knowledge and expertise. To avoid this unhappy state of affairs, the philosopher insists that the essences exist as starting-points. Contrary to Vlastos's interpretation, Plato does not show himself to misconstrue universals as a higher grade of particulars. Nor is he guilty of the mistake that Irwin claims for him. Plato does not jump to a metaphysical conclusion about the ontological status of the Forms merely because justice, beauty, etc., are not definable in terms of sensible properties.

vii. Heraclitean flux

Owen and the Oxford school of commentators have been influential in Platonic scholarship in second half of the twentieth century, but Aristotle has always been the dominate authority in the field. Given his long tenure in Plato's Academy, his obvious brilliance, and his deep and abiding interest in the philosophical issues that inform the Theory of Forms, no serious attempt to understand the development of Plato's

thought can afford to ignore Aristotle's explanation in the *Metaphysics* at 987a32-b7, 1078b9-1079a4, and 1086a31-b11.

Aristotle's remarks are very familiar. Every serious student of the history of philosophy knows that Aristotle says that Plato concluded that the Forms are substances on the basis of considerations involving definition, knowledge, and the Heraclitean "flux" of sensibles. The problem is to understand what Aristotle means. His remarks have very little straightforward content. They require substantial interpretation, and any acceptable interpretation must be consistent with, and help to shed light on, Plato's thought in the dialogues.

Many influential scholars have supposed, in solution to this problem, that Aristotle's explanation should be taken to confirm the view that the Theory of Forms has its origin primarily in Plato's association with Cratylus and the extreme Heracliteans. On this interpretation, Plato accepts from Socrates that knowledge is possible, but his association with the extreme Heracliteans pushes him to the conclusion that the Forms are substances. He agrees with them that the sensibles are in radical flux. On the basis of this belief, together with his belief that knowledge is possible, Plato concludes that the objects of knowledge must be unchangeable Forms that exist in a third realm. He concludes that the objects of knowledge cannot be the sensibles, for these objects are caught up in radical flux.

This interpretation has many problems, but the worst is that it wrongly subjects Plato to the twin evils of radical flux and skepticism about the ordinary objects of experience. No where is there sufficient evidence to warrant attributing these implausible beliefs to Plato. In certain passages in the *Phaedo*, e.g., passages which many have taken to provide the necessary evidence, Plato does draw a sharp contrast between the Forms and the sensibles. As I read this contrast, however, it does nothing to commit Plato to the paradoxical proposition that the sensibles are in radical flux. Plato says that the Forms are eternal, unchangeable, and intelligible. Plato says that the ordinary objects of experience are transitory, changeable, and sensible. This does not show that he believes that the sensibles are in radical flux.

Plato matches this sharp contrast between Forms and sensibles with an equally sharp contrast between thinking and sensing. He says that

thinking about the Forms, as opposed to using the senses to look to nature, is the most proper activity of the philosopher. Again, however, at least as I understand this contrast, it is hardly sufficient evidence to show that Plato was a skeptic about the sensibles. It does nothing to show that he believed that there can be no knowledge about matters involving the ordinary sensible objects of experience.

Some scholars claim that the *Republic* provides part of the necessary evidence, but once again, the text is too weak to support the position. Plato does argue that, in trying to understand essences in terms of the many conventions of the many, the lover of spectacles must accept a conception of reality according to which, instead of political knowledge and expertise, only "opinion" and "fancy" are possible. Plato's argument, however, does not depend on the premise that the ordinary sensible objects of experience are in such radical flux that they are not possible objects of knowledge. It depends on the premise that an ontology in which conventions stand in the place of a third realm of Forms is part of a conception of reality that is inconsistent with the possibility of knowledge.

This way of understanding the premise fits with the central argument in the *Republic*, which is Plato's most important argument in the middle dialogues, and perhaps also in all of ancient philosophy. Plato argues that only the philosopher is fit to rule, and one of his premises is that only the philosopher accepts a conception of reality according to which there can be political knowledge and expertise. Plato is not a skeptic. He does not believe that no one can know anything about the sensible world. This skepticism would be diametrically opposed to the main point of the *Republic*. Contrary to common belief, Plato does not abandon the worldly concerns of men. Just the opposite is true. He is convinced, and tries to demonstrate, that only the philosopher has a conception of reality according to which such concerns fall within the scope of knowledge.

Irwin has tried to provide a better interpretation of Plato and Aristotle, and his work has taken on the air of orthodoxy. On his interpretation, Plato is neither a skeptic nor an extreme Heraclitean about the sensibles. The key to Irwin's more charitable interpretation is his novel claim about the way that Plato understands the flux of

sensibles. He claims that Plato takes the flux of sensibles to be the reduction of opposites into sensible properties, not the succession of opposites in sensible particulars. In this way, Irwin squares his interpretation of Aristotle with his interpretation of Plato. Irwin, recall, maintains that the Theory of Forms stems from a conflation. On his interpretation, Plato argues that justice, beauty, etc., cannot be defined in terms of sensible properties. In the terminology that Irwin inherits from Owen, Plato claims that the Forms are "compressed" with their opposites in the sensible properties. The compression of Forms with their opposites in sensible properties has no import for how the Forms exist, but Irwin claims that Plato believes otherwise. He claims that Plato concludes that the Forms exist separately and as substances. He makes this mistake, according to Irwin, because he conflates sensible objects and sensible properties.

I am in complete agreement with Irwin's attempt to save Plato from the twin evils of skepticism and extreme Heracliteanism, but this is where my agreement ends. The Theory of Forms does not stem from a simpleminded mistake. Irwin's interpretation of Aristotle's remarks on the development of Plato's thought is only as good as his interpretation of the *Phaedo* and the *Republic*, and much more can be said for Plato in these great middle dialogues than Irwin would have his readers believe. He frees Plato from the twin evils, but he still saddles him with more problems than he deserves. Plato concluded that the Forms are substances, not because he fell into confusion over sensibles, but because he believed that no other way of fitting essences in reality would validate the leading assumptions in Socrates's method of inquiry. This is the import of both the *Phaedo* and the *Republic*.

Since Aristotle's explanation can be understood in a way that is consistent with the *Phaedo* and the *Republic*, this is how it should be understood. Aristotle's remarks are brief, but they are to the philosophical point. He frames the debate not as a historian, but to highlight what he takes to be the underlying mistake in Plato's metaphysics. Plato and Aristotle agree that definitional truths are necessary for the possibility of knowledge. Furthermore, although he does not voice his agreement, Aristotle agrees with Plato's conclusion against the lover of spectacles. He agrees that claims about justice,

beauty, etc., do not depend on the "fancies" of the many. The debate is over whether the essences are ground in the reality of sensibles. Aristotle insists that the essences are somehow "in" sensibles, that the essences do not exist separately and as substances. In his sketch of the accomplishments of his predecessors, he explains that not appreciating this fact is the mistake that gives rise to the Theory of Forms. Aristotle says that "<s>eparation is responsible for the difficulties arising about <the Theory of> Ideas" (1086b8).

On my interpretation, Aristotle's explanation both confirms and helps to shed important light on Plato's reasons for concluding that the Forms exist as substances. Socrates's autobiography in the *Phaedo* is a difficult passage, but, at the very least, it shows that Plato rejected the natural scientists's method of intellectual inquiry in the search for knowledge. Because their method does not recognize the proper place of Socrates's "What is F?" question, Plato believed that it carries a conception of reality that eliminates the possibility of knowledge. Plato leaves his readers to conclude that the natural scientists cannot provide for the possibility of knowledge because they either deny that essences exist or try to explain them in terms of more basic objects.

The way Aristotle highlights his debate with Plato helps to illuminate this line of argument against the natural scientists. Aristotle's remarks suggest that Plato thought that no ontology that takes "sensibles" (αἰσθητά) for starting-points is consistent with the existence of "intelligibles" (νοητά). Plato thought that because the natural scientists try to make reality rest on certain sensible starting-points, such as portions of water, air, etc., and because these objects are "flowing," the natural scientists accept an ontology that can provide no stable perch for the existence of essences.

viii. Forms and the four kinds of stuff

Not only does my interpretation make good sense of Aristotle's remarks, it illuminates a set of extremely difficult and well known passages in one of the late dialogues. The dialogue is the *Timaeus*.[19] Very early in the dialogue, because the inquiry concerns the natural

world, Socrates relinquishes his lead to Timaeus. Unlike Socrates, Timaeus is an expert in philosophy and cosmology.

Near the "works of necessity" (47e-69a), just before he introduces the Receptacle into his ontology, Timaeus sets himself against the Ionian natural scientists who suppose that the ontological starting-points in reality are portions of fire, air, water, and earth. Plato's intent in this and subsequent passages is much debated, but given Aristotle's remarks on the origin of the Theory of Forms, and given Plato's earlier arguments against the natural scientists and the lovers of spectacles, a very natural and illuminating interpretation is possible.

Timaeus sets himself against these Ionians because he intends to show that their ontology is inconsistent with the possibility of knowledge. He supposes that only the Forms and other "intelligibles" (*νοητά*) are fit to be starting-points in a conception of reality that is consistent with knowledge. He insists that these objects are the starting-points in formal explanations of "sensibles" (*αἰσθητά*), such as portions of the stuffs of the four kinds. He argues that if, as is true for the Ionian natural scientists, stuffs of the four kinds are the starting-points in reality, then skepticism is unavoidable. He argues that the Ionian natural scientists cannot provide definitional "accounts" (*λόγοι*) for the terms *πῦρ* ('fire'), *ὕδωρ* ('water'), etc., that are "trustworthy and firm" (49b5) enough to provide for the possibility of knowledge about matters involving these four kinds of stuffs.

Timaeus states his argument briefly, but his main point seems to be that the Ionian natural scientists must give unacceptable replies to the "What is F?" question. He seems to suppose that the Ionian scientists must point to sensible objects and utter sentences such as *Τοῦτο πῦρ ἐστι* ('This is fire') and *Τοῦτο ὕδωρ ἐστι* ('This is water'), and he rejects such responses as wholly inadequate ways to answer the question. Theses responses are inadequate, according to Timaeus, because the sensible objects of the respective demonstrative pointings somehow do not have enough "firmness" (49d7), and somehow are not "steadfast" (e3) enough, to provide accounts that are "trustworthy and firm" enough to provide for the possibility of knowledge about matters involving fire, water, and the other stuffs.

The proper responses are of the form Τοιοῦτον ὕδωρ ἐστι ('Such-and-such is water') and Τοιοῦτον πῦρ ἐστι ('Such-and-such is fire'). Responses must take this form, according to Timaeus, because only such responses are consistent with the role of the Forms the fire itself, the water itself, etc., to provide the information necessary to fill the τοιοῦτον ("such-and-such") schemata. He argues that only the Forms are "steadfast" enough to provide accounts that are "trustworthy and firm" enough to provide for the possibility of knowledge.

Plato and the Ionians agree that such knowledge is possible, but he argues that they have completely failed to see the significance of this possibility. He argues that the Ionians have failed to see that this possibility imposes significant and far reaching restraints on how reality can be. Plato argues that if, as is true in the Ionian cosmology, the starting-points in reality are sensible objects, such as portions of fire, water, etc., then the distinction between knowledge and true belief would collapse, and fancy would be all that remains.

Unlike Socrates's autobiography in the *Phaedo* and the discussion of the philosopher and the lover of spectacles in book V of the *Republic*, there is no orthodox interpretation for these passages from the *Timaeus*. They are notorious for their for impenetrability. All scholars recognize their importance for understanding the Theory of Forms, but despite repeated efforts, these passages have stubbornly resisted analysis. In the secondary literature, a wide diversity of interpretations have come to occupy an uneasy co-existence.

Although the passages in question are hardly straightforward, this is not the only source of their resistance to analysis. Another important and more easily eliminated source of the problems that plague many commentators is in the background assumptions that they try to bring to these passages. One particularly problematic such assumption stems from what I have argued is a fundamentally mistaken interpretation of Aristotle's explanation of the origin of the Theory of Forms. This assumption is common to many interpretations. Cherniss and Gulley, e.g., despite their other serious differences of opinion, both interpret the *Timaeus* against the background assumption that Plato was influenced by the extreme Heracliteans and came to believe that the sensibles are always flowing in every way and that there can be no

knowledge with respect to such objects. This is a mistake. Plato's previous arguments against the natural scientists and the lovers of spectacles provide the proper background assumptions for the *Timaeus*. With these arguments in the background, the correct interpretation comes into focus. Timaeus argues against a conception of reality in which essences are not starting-points. As in the autobiography in the *Phaedo* and in book V of the *Republic*, so also in this section of the *Timaeus*, Plato shows himself to believe that such an ontology is inconsistent with the possibility of knowledge.

ix. Plato's place in history

Plato's belief that the Forms are substances did not spring from a trivial confusion. It was a response to a philosophical problem that he inherited from Socrates. In his search for knowledge, in his insistence that he and his interlocutors must first answer the "What is F?" question before they can answer the other questions that concern them, Socrates was part of an intellectual movement that struggled with issues connected to the very perplexing third condition that is necessary for knowledge, the so-called "justification" condition.

Socrates was not the only member of this movement. The justification necessary for knowledge was already a topic of discussion in the pre-Socratic period. The sixth century Milesian cosmologists incorporated an optimism concerning the possibility of knowledge. Thales and his "school" made bold assertions about the underlying nature and behavior of the universe. These assertions undermined the unreflective confidence in the orthodox conception of reality. This, in turn, provoked a discussion of the methods for acquiring knowledge. Some of this discussion is preserved in the fragments of Xenophanes, Heraclitus, Parmenides, and other pre-Socratics.

In fifth century Athens, after Pericles's legal reforms made oratorical skill necessary for political power, a different set of events again provoked inquiry into the methods for acquiring knowledge. With the spectacular rise of the sophists, and the new use of rhetorical skill to manipulate the will of political bodies, many confused the power of the spoken word with the force of reason. Socrates was the

exception. To expose and to combat this confusion, he insisted on the method of discussion by question and answer. He tried to screen the use of rhetoric and make persuasion come through reason.

These achievements are important, but they do not exhaust Socrates's claim to philosophical immortality. In his search for knowledge, he did not just turn his back on explanations according to the natural scientists's method of inquiry. Nor did he just provide an antidote to the sophists's tendency to conflate the power of the spoken word with the force of reason. Socrates started an intellectual revolution. He introduced a new method of inquiry. About matters involving justice, beauty, and the other properties he used his "What is F?" question to ask about, he insisted on the priority of definition. He insisted that definitional truths are part of the justification necessary for knowledge. He believed that, on such matters, knowledge is not possible unless definitional knowledge is possible.

Socrates's belief about the structure of knowledge was new and compelling, but it was also perplexing in ways that he did not appreciate. His belief presupposes that on matters involving justice, beauty, and other such properties, empirical truths depend on formal truths. Empirical truths can seem straightforward enough, but formal truths have always been deeply puzzling. Socrates's essences are not easy to fit into reality, and this fact casts doubt on the coherence of his conception of the structure of knowledge. If the essences are not to be wholly subjective, they apparently must have their ground in something more than just mere "convention," for otherwise, as Aristophanes says in the *Clouds*, what passes for truth would be nothing more than the whims and fancies of those who manage to "talk over the crowd" (1422). What this something is, however, is not immediately evident. Philosophers in the Aristotelian tradition have hoped to make sensible objects do part of the necessary work, but just how they can do this work has never been made completely clear.

Plato struggled with this problem. He accepted Socrates's assertion about the structure of knowledge, and he became convinced that essences must exist in reality as substances. Plato became convinced that the alternative conceptions of reality, as he understood them, were inconsistent with the possibility of knowledge. This is the import of

Phaedo 95e-102b, *Republic* 473d-480a, and *Timaeus* 48b-52d. In these passages, Plato argues against the conceptions of reality that he associates with the Ionian natural scientists and the sophists. Plato argues that if there were no third realm of Forms, then the distinction between knowledge and true belief would collapse. He argues that there would be no facts of the matter, and instead of knowledge and expertise, only whim and fancy would be possible.

With Socrates as the catalyst, and against the background of the Milesian cosmological speculations and the confusion over justification among the sophists, Plato created a new conception of reality to account for the possibility of human knowledge. Heraclitus, Parmenides, and others had reacted to the Milesians. Socrates had reacted to the sophists, but Plato's reaction stands apart as an extraordinary and singular achievement. It resulted in the first great world view in the history of philosophy. Plato created a conception of reality, and the place of humans in it, that for a short time seemed to validate the leading assumptions in the Socratic method of inquiry. Plato supposed that knowledge is possible because there are Forms in a third realm. He supposed that humans, if they are philosophers, can acquire knowledge because before birth they were with these Forms, and in life they can recollect what they once knew.

Few twentieth century philosophers accept Plato's specific metaphysical conclusions,[20] and I have no intention of trying to convince them otherwise, but I do believe in giving credit where it is due. Plato went beyond Socrates and concluded that the Forms are substances. This is true, but it is only one part of the story. The remaining, and often untold, part of the story is that Socrates was idle and Plato stepped past him and into the ring with a genuine philosophical problem that Socrates only dimly recognized, and perhaps did not recognize at all. To show that human knowledge is possible, Plato recognized that he must present a conception of reality, explain the place of humans within it, and show how such beings can acquire knowledge. His conception is no longer compelling, but it is an attempt to solve a genuine problem. It is not a pseudo-problem, born in a simpleminded confusion, that some subsequent more sober-minded philosopher could easily expose and quickly eliminate. Aristotle and

subsequent philosophers have produced different conceptions, but no one has yet produced a completely convincing conception. After all these years, the philosophical problem remains unsolved.

2

PLATO'S TRIBUTE TO SOCRATES

i. Introductory remarks

Socrates's thoughts about the proper way to search for knowledge are a crucial part of the intellectual background against which Plato came to believe that the Forms are substances.[1] Plato presents these thoughts in the early definitional dialogues in the passages in which his character presses the "What is F?" question in his search for knowledge. Plato presents a history of these thoughts in the passage in the *Phaedo* in which his character gives an autobiographical account of his dispute with the natural scientists.[2] Plato takes Socrates's side in this dispute, and Plato shows himself to conclude that the leading assumptions in Socrates's method of intellectual inquiry are inconsistent with a conception of reality in which the Forms are not substances.

ii. Socrates's "What is F?" question

The search for answers to the "What is F?" question is the most prominent feature of the pre-*Phaedo* dialogues, and two aspects of this search are striking. The first is Socrates's insistence on the "priority of definition." The second has not attracted enough attention to garner a name, but for reasons that shall soon be evident, I call it the "priority of Form." With respect to matters involving justice, beauty, etc., the priority of definition and the priority of Form constitute a central part of Socrates's method of inquiry in his search for knowledge.[3]

Every serious student of ancient philosophy knows that Socrates seems to insist that he and his interlocutors must know the essence of F-ness before they can answer the other questions that concern them.[4] In the famous passage at the end of book I of the *Republic*, Socrates seems to insist on this point with respect to justice:

> I have not had a good banquet, but that was my fault, not yours. I seemed to have behaved as gluttons do, snatching at every dish that passes them and tasting it before they have reasonably enjoyed the one before. So I, before finding the answer to our first enquiry into the nature of justice, let that go and turned to investigate whether it was vice and ignorance or wisdom and virtue. Another argument came up after, that injustice was more profitable than justice, and I could not refrain from following this up and abandoning the previous one so that the result of our discussion for me is that I know nothing; for, when I do not know what justice is, I shall hardly know whether it is a kind of virtue or not, or whether the just man is unhappy or happy (354a13-c3).[5]

Socrates leaves his interlocutors to conclude that no one should try to come to know whether justice is a virtue, or whether the just person is happy, unless he first knows what justice is. Violating this injunction is an intellectual vice akin to the moral vice of gluttony.

Although less well known, the *Hippias Major*[6] contains two passages that provide equally good examples of Socrates's insistence on the priority of definition. In this dialogue, Plato makes Socrates adopt a humorous device to make his point. He makes him report the words of a fictional questioner who plays the role of spoiler that Socrates himself plays in other definitional dialogues:

> Quite lately, my noble friend, when I was considering as ugly some things in certain compositions, and praising others as beautiful, somebody threw me into confusion by interrogating me in a most offensive manner, rather to this effect. You, Socrates, how do you know what things are beautiful and what are ugly? Come now, tell me what beauty is (286c5-d2).

> I am called every kind of bad name by... that man who is always cross-questioning me. He is a very close relative of mine and lives in the same house, and when I go home and he hears me utter these opinions he asks me whether I am not ashamed of my audacity in talking about a beautiful way of life, when questioning reveals that I do not even know what beauty is (304d1-8).

In these passages, the fictional questioner scolds Socrates for violating the priority of definition. He says that Socrates should be "ashamed," that he is wrong to claim to know that certain things are beautiful when questioning shows that he does not know what beauty is.

These passages from the *Hippias Major* and the *Republic* are not the only passages in which Socrates insists on the priority of definition. This principle informs the search for knowledge in nearly all the early definitional dialogues.[7] Socrates relies on the priority of definition in the search for knowledge as the reason for his relentless search for the essences of beauty, justice, and the other such properties.

Once his interlocutors grant the priority of definition, Socrates presses the search for a definition in striking way. He takes great care to focus attention on the "Form" that he supposes the "What is F?" question is about, and he suggests that this Form somehow determines the properties that make objects be F. He uses an instance of

(Q1) What is that "by which" (instrumental dative)[8] all F-things are F?

or a sentence relatively like it, e.g.,

What is that "because of which" (διά) F-things are F?
What is the "cause" (αἴτιον) of F-things being F?
or What is the "producer" (ποιοῦν) of F-ness in F-things?

as a way of eliciting the preliminary response,

(A1) The F. (Or: The Form the F itself.[9])

After getting the preliminary (A1) response to the (Q1) question, Socrates asks the definitional question,

(Q2) What is the F?,

in hopes of getting an acceptable definitional answer. The *Hippias Major* provides an especially good example of this practice:

> He would say, Stranger from Elis, is it not by (instrumental dative) justice that the just are just? Would you answer, Hippias, as if he were asking the question?
>
> I shall answer that it is by justice.
>
> Then this, namely justice, is definitely something.
>
> Certainly.
>
> Again, it is by wisdom that the wise are wise, and by goodness that all things are good?
>
> Undoubtedly.
>
> That is, by really existent things--one could scarcely say, by things that have no real existence?
>
> Quite so.
>
> Then are not all beautiful things beautiful by beauty?
>
> Yes, by beauty.
>
> Which has real existence?
>
> Yes, what else do you think?
>
> Then tell me, stranger, he would say, what is this thing, beauty (287c1-d3)?

In the guise of a fictional questioner, who no doubt is really Socrates himself, Socrates insists that the Form the F itself makes F-things be F. Once his interlocutor agrees, he uses his "What is F?" question to press the search for a definition.[10]

The priority of definition and the priority of Form are both important for understanding why Plato came to believe that the Forms are substances. Socrates may have accepted a strong and implausible form of the priority of definition, but the definitional dialogues show that he certainly accepted the weaker and much more plausible version that if knowledge about matters involving F-ness is possible, then definitional knowledge of F-ness must also be possible. Socrates assumed that the Form the F itself determines what properties constitute the essence of F-ness. When he asks the "What is F?" question, he assumes that he is asking about the Form the F itself.

These assumptions are not beyond question, but they are reasonable enough. With respect to matters involving aesthetic and moral properties, the conditions necessary for the possibility of knowledge probably do include a ground for the existence of formal truths. The problem is not so much with the claim that there are formal truths and that they have a foothold in reality. The problem is the ontological

status of the Forms. Socrates invests them with an explanatory function, but he is silent about how they exist. Like someone who explains that certain properties make objects be beautiful because they are part of the meaning of the predicate 'is beautiful,' Socrates explains that certain properties make objects be beautiful because they are part of the Form the beautiful itself. He does not say how the Form exists in reality so that it can discharge this explanatory function. He just says that Form the beautiful itself is that "by which" (instrumental dative) beautiful things are beautiful.

This is an unstable combination. Socrates neither believed nor denied that the Forms are substances, but the *Hippias Major* and other early definitional dialogues clearly suggest that he invested the Forms with an explanatory function that they cannot very well keep unless they become substances. To prevent the explanation in terms of the meaning of the predicate 'is beautiful' from giving way to a more natural explanation in terms of sensible reality and the linguistic practices of language users, meanings have to be relocated to a third realm. If the Forms are to retain their explanatory roles, they too have to be relocated to a third realm. They must become substances.[11]

iii. A new method of inquiry

Plato recognized that Socrates's method constituted a major break from previous practices, and although twentieth century philosophers do not share Plato's enthusiasm, he applauded Socrates for breaking with tradition and giving the philosopher a new method of inquiry. The most important place where he helps his readers to understand the significance of Socrates's break with tradition is in the autobiography in the *Phaedo*. Plato makes his character give an account of his intellectual history to showcase both the problems that Socrates pushed to the center of philosophy and the reasons he may have had for rejecting the way that his predecessors handled these problems.

The character explains that, although he now "in no way inclines towards <this method of inquiry>" (97b6-7), as a young man he was "remarkably keen on the kind of wisdom known as inquiry into nature" (96a6-8). During this time in his youth, Socrates says that he accepted explanations such as following:

> <W>henever a large man standing beside a small one appeared to be larger, <he is larger> by (instrumental dative) a head; similarly with two horses (96d9-e1).
>
> <T>hat the ten was greater than the eight because (διά) of the two in them, and that the two cubits were larger than the one cubit because (διά) of their exceeding the latter by half (96e2-4).

When his interlocutor asks what he now believes about explanations according to this method of inquiry, he responds that he rejects them:

> I am far from supposing I know the explanation (αἰτία) for any of these things, when I do not even accept from myself that when you add one to one, it is either the one to which the addition is made that comes to be two, or the one that has been added and the one to which it has been added, that have come to be two, because of the addition of one to the other, because I wonder if, when they are away from each other, this becomes a cause (αἰτία) for their coming to be two, namely to be placed together near each other. Nor if you divided some one thing, am I still able to be persuaded that this, in turn, the dividing, has become a cause (αἰτία) for their coming to be two. This is opposite to the previous cause (αἰτία) for becoming two. Then it was their being brought close to each other and added, one to the other; whereas now it is their being drawn apart, and separated each from the other (96e6-97b3). <I reject> that method of inquiry. Instead I rashly adopt a different method, a jumble of my own, and in no way incline towards the other (97b6-7).

He became disenchanted with his predecessors because, as the definitional dialogues show, he wanted to know the essences of various properties. If one presses the explanations of the natural scientists for answers to such questions, he believes that unacceptable answers are the result. These explanations provide answers such as

(1) Large things are large by heads.

(2) Ten things are greater in number than eight by possessing two things.
(3) Two things are two by being placed near each other.

At some time in his youth, Socrates rejected these answers in his search for knowledge and adopted a new "method" (μέθοδος) to answer the questions that prompt the request for definitions. This new method is the same method that he follows in the early definitional dialogues:

> <N>othing else makes (ποιέω) it beautiful except that beautiful itself, whether by its presence or communion or whatever the manner and nature of the relation may be, as I do not go so far as to affirm that, but only that it is by (instrumental dative) the beautiful that all beautiful things are beautiful (100d4-8).

> You would beware of saying that when one is added to one, the addition is the explanation (αἰτία) for their coming to be two, or when one is divided, that division is the explanation. You would shout loudly that you know no other way in which each thing comes to be, except by participating in the peculiar being of any given thing in which it does participate. In these cases you own no other explanation (αἰτία) for their coming to be two, save participation in twoness. Things which are going to be two must participate in that, and whatever is going to be one must participate in oneness (101b9-c7).

As he does in so many previous dialogues, Socrates insists on the (A1) answer to the (Q1) question. In his search for knowledge, he insists on this preliminary answer before he is willing to proceed to the (Q2) question and the quest for a definition.

One reason he gives for rejecting the explanations of the natural scientists is that they do not provide necessary and sufficient conditions in response to the (Q2) question. He presses this objection in several passages. In 96e6-b3, which I quoted, he gives example accounts in which bringing two things close together and dividing a given object into two objects are alleged to explain why two things are two. He

rejects these accounts as inadequate because he insists that "opposites" cannot explain why something has a given property. This eliminates accounts that do not provide necessary conditions. In 100e8-101b2 and 101b4-7, he gives example accounts in which having a given feature is alleged to explain "opposite" properties. He remarks:

> <Y>ou would not allow anyone to say that one man was larger than another by a head, and the smaller was smaller by that same thing, but you would protest that you for your part will say only that everything larger than something else is larger by nothing but largeness, and because of this is larger, because of the large, and that the smaller is smaller by nothing but smallness, and because of this is small, because of the small. You would be afraid, I imagine, of meeting the following contradiction: if you say that someone is larger and smaller by a head, then, first, the larger will be larger and the smaller smaller by the same thing; and secondly, the head, by which the larger man is larger, is itself a small thing, and it is surely monstrous that anyone should be large by something small....
>
> <Moreover, you would> be afraid to say that ten is greater than eight by two, and that this is the explanation (αἰτία) for its exceeding, rather than that it is by numerousness, and because numerousness, or that two cubits are larger than one cubit by half, rather than by largeness. Because, of course, there would be the same fear.

Possessing a given pair of things, Socrates says, cannot explain why a given group of things is greater in number than eight because no property can explain "opposite" properties. This eliminates accounts that do not provide sufficient conditions.

Socrates also gives another reason for rejecting the explanations according to the method of inquiry of the natural scientists. This reason is more serious, more interesting, and much more important for Platonic scholarship than that the natural scientists provide accounts that are open to counterexample.[12] In 100c9-d8, which occurs just after he and his interlocutors have agreed to accept only explanations in terms of the Forms that exist "themselves according to themselves"

(αὐτὰ καθ' αὑτά), Socrates dismisses all explanations according to the method of the natural scientists as outright non-starters. He makes this point in no uncertain terms. Socrates announces that he no longer can understand or recognize such explanations:

> I no longer understand nor can I recognize those other wise (σοφός) explanations (αἰτίαι), but if anyone says to me that a given thing is beautiful because it has a blooming color, or a shape, or something else like that, I dismiss those other things--for they all trouble me--but in a plain, artless, and possibly simpleminded way, I hold this close to myself: nothing makes (ποιέω) it beautiful except that beautiful itself... (100c9-d5), it is by (instrumental dative) the beautiful that all beautiful things are beautiful (100d7-8).

Plato is not explicit about why Socrates rejects "those other wise explanations" as non-starters in the search for knowledge, but his reasons should not be difficult to grasp.

Plato believes that these explanations are unacceptable because they are born in a methodology that is misguided with respect to the place of the "What is F?" question in the search for knowledge. He rejects explanations according to the natural scientists's method because he believes that if one were to adopt it as the "philosophical," i.e., scientific, method of intellectual inquiry, then about matters involving beauty, justice, etc., knowledge would be impossible. Such knowledge would be impossible, he believes, because if explanations according to their method of inquiry were to replace explanations in terms of the definitional content of Forms, then one would have to accept a conception of reality that makes this knowledge impossible. The essences that were starting-points in the Platonic conception of reality must either have explanations or not exist.

Plato does not say whether the scientists explain essences in terms of more basic objects, but given Socrates's insistence in the autobiography and earlier in the dialogue that thinking about the Forms, as opposed to using the senses to look to nature, is the most proper activity of the philosopher (99e2-6, 65d-68b), he may believe that they maintain that essences supervene on the reality of sensibles and the linguistic practices of language users. This would trouble Plato

enough to make Socrates reject their method of inquiry as a non-starter because it is part of a conception of reality that does not make essences exist as substances and ontological starting-points. On this conception of reality, no intelligible object exists as a substance. The only substances are sensible objects, such as the portions of water, fire, etc., that are traditional in Ionian cosmology.

Alternatively, and perhaps more plausibly, instead of supposing that the natural scientists have a view about how essences exist, Plato may believe that they ignore the (Q1) and (Q2) questions altogether.[13] He may believe that the natural scientists make sensible objects be starting-points in their conception of reality and are not interested in essences. He may believe that they see no need to answer the definitional question in the search for knowledge. This too would trouble Plato enough to make Socrates reject explanations according to their method of inquiry as outright non-starters. Plato believed that only Forms that exist as substances, i.e., "themselves according to themselves" (αὐτὰ καθ' αὐτά), can insure that there are definitional truths to be possible objects of knowledge, and he firmly believed that unless there are such truths, no one can know the answers to the other questions involving beauty, justice, etc., that prompt the search for knowledge.

At the end of the autobiography, if the reader still has not understood the Socratic revolution, Plato has Phaedo repeat the main point near the end of the interlude after the autobiography, and before he returns to the primary topic of the conversation:[14]

> As I recall, when these points had been granted to him, i.e., (epexegetical καί) it was agreed that each of the Forms was something and that by partaking in them the other things took the names of the Forms, he next asked... (102a10-b3).

Phaedo repeats a lesson that Socrates may have tried to impress on his interlocutors on the last day of his life.[15] This is the very same lesson that Plato is trying to impress on his readers. Socrates introduced a new "method" (μέθοδος) of inquiry, and he started a revolution among the intellectuals of his day. He assumed, in his pursuit of truth, that knowledge about matters involving justice, beauty, etc., presupposes knowledge of the essences of these properties. Socrates turned his back on the natural scientists, suggested that the essences necessary for

knowledge have their source in Forms, and he left Plato to provide the advertisement and to articulate the argument.

Socrates's autobiography contains the argument and is the advertisement. In this passage, Plato's character supposes that explanations in terms of the definitional content of Forms cannot be eliminated in favor of explanations according to natural scientists's method of inquiry. He supposes that this method is part of a conception of reality that eliminates the possibility of definitional knowledge. He supposes that this, in turn, eliminates the possibility of knowledge with respect to the questions that prompt the inquiry. Plato believed that knowledge is not possible unless essences are starting-points in ontology, and the autobiography in the *Phaedo* is his tribute to Socrates for turning philosophy to explanations in terms of the definitional content of Forms and away from explanations according to the method of the natural scientists.

Socrates's autobiography thus holds a distinguished place in the ancient world that is importantly analogous to the place that Descartes's *Discourse on Method* and *Meditations* hold in the modern world. Descartes put forward a new method of intellectual inquiry, and he put forward a new metaphysics to validate this method. Socrates and Plato split this labor. Socrates put forward a new method of inquiry. He insisted on the priority of definition and the priority of Form. Plato put forward the metaphysics. He insisted that the Forms are substances and ontological starting-points, i.e., that they exist in reality "themselves according to themselves."[16]

iv. Against Vlastos

In "Reasons and Causes in the *Phaedo*," Gregory Vlastos gives a now classic and widely accepted interpretation Socrates's intellectual autobiography. Vlastos insists that the importance of this passage can "hardly be exaggerated," since "as much is to be learned from it about Plato's metaphysics... as from any other text of equal length in the corpus" (p. 291). I agree with much of Vlastos's interpretation, and am in full agreement with his claim that the autobiography passage is extremely important for Platonic scholarship, but I deny that its main lesson is the one that he claims for it.

Because Socrates says that before he became interested in Forms, he was interested in the kind of "wisdom" that contemporaries call "natural science," but known in his day as "inquiry about nature," Vlastos tries to see Plato as anticipating Aristotle's Doctrine of the Four Causes and as using a technique that has become part of the stock-in-trade of analytic philosophers. He argues that Plato tries to solve philosophical puzzles concerning cause and explanation by exposing unapparent senses of the Greek noun αἰτία. Vlastos writes:

> All four puzzles in 96B8-E4 will yield to the same treatment on the hypothesis that all of them crop up because in this benighted phase of his philosophical evolution Socrates was confusing physical αἰτίαι with logical ones... (pp. 313-314).
>
> I say "hypothesis," for certainly there is nothing whatever in the wording of these six lines which states or implies that their puzzles arise because physical factors are being confused with logical ones. For this hypothesis I claim no more than indirect verification from the context (n. 61 on p. 313).
>
> Had he availed himself, as Aristotle was to do, of the expository device of philosophical lexicography, this achievement would have been more perspicuous.... However, we should not be put off by the fact that at no point does he say in the style of his great pupil and critic, "αἰτία has many different senses." There are other ways of exhibiting distinctions, and one way of doing so is to use them. This, I have argued, is what Plato does in our passage... (pp. 324-235).

Vlastos maintains that Plato realizes, and is trying to help his readers to realize, that homonymy can be insidious and that the word αἰτία is homonymous in this way. Because in his youth Socrates did not notice this fact, he fell into confusion. He failed to notice that the word αἰτία and its cognates are used for different kinds of causes, including logical and physical causes,[17] and that different kinds of causes are appropriate for different kinds of explanations.[18] By the time of the *Phaedo*, on the last day of his life, Socrates has realized his mistake,

and he explains this mistake to his interlocutors so that they need not fall into the same confusion. On Vlastos's interpretation, Plato does in a very rough way what Aristotle later does in a much more polished and sophisticated way in the *Metaphysics* in his discussion of his predecessors's views on cause and explanation.

Anyone in search of antecedents for Aristotle's Doctrine of Four Causes might believe that the *Phaedo* is fertile ground, since Aristotle refers it in his discussion of causes (*Metaphysics* 991b3), but Vlastos has drastically overstated Plato's achievement. He is correct that Plato's character is interested in what Aristotle might describe as "formal explanation." He is also correct that this new interest is part of a "conscious abandonment" of a previous "line of thought" and that this turn away from the methodology of the natural scientists is "one of the great turning-points in European natural philosophy" (p. 297). Vlastos, however, is fundamentally wrong to try to see Plato as anticipating the Doctrine of the Four Causes.

Aristotle is traditionally thought to be the first philosopher to maintain that homonymy is not confined to situations where it is readily detectable, as, e.g., in the case where 'light' is said of dark feathers, but also may appear in contexts where its presence is not obvious, as, perhaps, in the case where 'exist' is said of minds and bodies. Not only does he seem to discuss homonymy in several places, but his most characteristic views appear to involve claims of homonymy. The Doctrine of the Four Causes is a good example. It is commonly interpreted in part as the claim that the word αἰτία is homonymous in a way which escaped the notice of earlier philosophers.

On Vlastos's interpretation, Plato, not Aristotle, was the first to insist that homonymy can be insidious, but I see no good reason to accept this assertion. Nowhere in Socrates's autobiography, nor, for that matter, in any passage in the corpus, does Plato say of any word that it is homonymous in an insidious way. Vlastos claims only "indirect verification from the context" for his "hypothesis." I do not see that the "context" provides any verification, indirect or otherwise, and even it were to provide some small amount of indirect verification, this would not be enough evidence to support such a strong assertion. It would not be enough to show that Plato anticipated Aristotle on the ways in which words can be homonymous. Plato made important and

lasting contributions to the philosophy of language, but this is not one of them. On this point, I do not believe that there is sufficient evidence to accept Vlastos's interpretation.

Nor do I agree with Vlastos that, by having Socrates reject the explanations of the natural scientists, and insisting on explanations in terms of the definitional content of Forms, Plato is trying to explain to his readers that the word αἰτία can be used for both physical and logical explanations. If Plato were trying to help his readers grasp this point, he certainly decided to proceed in an unhelpful way. Socrates does not say that the accounts of the natural scientists are acceptable as physical explanations, but not as logical explanations. He simply rejects these explanations as inadequate.

In Vlastos's defense, one might try to argue that Plato intentionally leaves his readers to conclude that the word αἰτία can be used for both physical and logical explanations and that both kinds of explanation are acceptable in their separate domains. The textual evidence, however, is clearly against this interpretation. Both before and after the autobiography, Plato has opportunities to explain that the word αἰτία is used for many kinds of cause and explanation, but he always fails to capitalize on these opportunities. In the *Hippias Major*, e.g., instead of drawing distinctions between kinds of causes, Socrates is twice content to make Hippias agree simply that causes are producers:

> And the producer is nothing other than the cause?
> That is so, Socrates (296e8-9)

> Look at it this way. The cause was seen to be the producer, was it not?
> Certainly (297a4-5).

Since the *Hippias Major* pre-dates the *Phaedo*, Vlastos can insist that this passage does not undermine his interpretation. In the *Philebus*, however, which post-dates the *Phaedo*, Plato again makes the very same point:

> There is no difference except in name between a cause and the nature producing, but the producer and the cause quite properly would be called one?
> Quite properly (26e6-8).

These remarks are not what one should expect if, as Vlastos claims, Plato really believed that the word αἰτία and its cognates are used for many kinds of cause and explanation.

Furthermore, in the search for definitions, a search that in the dialogues Plato takes up both before and after the *Phaedo*, only once does he use the noun αἰτία or the adjective αἴτιος in connection with definition. This occurs in the *Hippias Major* at 299e4.[19] If Vlastos were correct, then, once again, this is not at all what one should expect. If Plato really believed that the word αἰτία and its cognates could be properly used in connection with the search for definitions, one should expect to find him using these words in this way.

Since Plato does not intentionally use the words for both physical and logical causes, does not make an effort to distinguish these uses of the words, and does not say that the words have these uses, one cannot very easily avoid the conclusion that Vlastos's interpretation is incorrect. Plato simply does not show himself to believe that the word αἰτία can be used for multiple and non-competing kinds of explanation, including both physical and logical explanation.

Not only is Vlastos's interpretation incorrect, but in trying to see Plato as anticipating Aristotle's Doctrine of Four Causes, he has obscured the development of Plato's thought. He has, in fact, mischaracterized Plato's most important reason for discussing the natural scientists. Socrates turned away from what Plato describes as "the kind of wisdom known as inquiry into nature." Whether Socrates simply ignored his predecessors or actually argued for his break with tradition is difficult to determine, but in the autobiography in the *Phaedo*, Plato makes his character supply an argument.

In the early definitional dialogues, as part of a new method of intellectual inquiry, Socrates puts forward the suggestion that knowledge has a structure. On matters involving beauty, justice, etc., he maintains that knowledge is not possible unless knowledge of the essences of these properties is possible. He furthermore suggests that these essences somehow have their source in Forms.

In the autobiography in the *Phaedo*, the character defends this suggestion by arguing against an ontology and conception of reality in which essences are not starting-points. He does not try to show his interlocutors that the word αἰτία can be used for multiple kinds of explanation and that each is acceptable in its place. Nor does he try to show them that the word αἰτία has multiple, but non-apparent senses. Contrary to Vlastos's interpretation, Plato does not try to make room for explanations according to the method of inquiry of the natural scientists. He maintains, rather, that explanations in terms of the definitional content of Forms cannot be replaced by adopting explanations according to the method of the natural scientists. Plato supposes that such explanations are part of a conception of reality in which essences do not exist as substances. He supposes that this, in turn, eliminates the possibility of knowledge about matters involving justice, beauty, and the other properties that interested Socrates and figured in the affairs of fifth century Athens.

Vlastos's interpretation is mistaken. Socrates's autobiography is not a poor attempt to express Aristotle's Doctrine of Four Causes.

v. Against Annas

Julia Annas also rejects Vlastos's assertion that in the *Phaedo* in Socrates's autobiography Plato shows himself to anticipate Aristotle's Doctrine of the Four Causes ([1982], p. 325). Indeed, according to Annas, instead of anticipating the Doctrine of Four Causes, Plato is actually badly confused in a way that Aristotle could have easily avoided with his views on homonymy:

> Plato sees himself as concerned throughout with a single topic: αἰτία or explanation. He is criticizing others' attempts at it and producing an improved account of it himself, assuming that there is a single "it" throughout. And what he began from was certainly a concern with causal explanation (p. 318).
>
> The *Phaedo* passage is thus a classic case of what Aristotle regards as confusion arising from failure to notice that a philosophically important term is being used as though it had

> a single sense, whereas in fact it is crucially ambiguous. ... Plato has failed to see that he is confusedly treating very different kinds of explanation. A grasp of Aristotle's point in *Physics* II.3 would have enabled Plato to transform his confused discussion into an unconfused discussion of three different kinds of explanation; but Plato shows no sign of any such grasp (p. 325).

Annas maintains that Plato conflated the different senses of the word αἰτία, or perhaps confuses the different kinds of αἰτίαι,[20] that Aristotle later distinguishes.

Annas argues that Plato's conflation caused him to make a category mistake. On her interpretation, he believed that causation is a transfer of properties, that something, *x*, causes a thing, *y*, to be F by somehow giving, or transferring, some F-ness to *y*:

> Plato's demand on explanation is one which we no longer find compelling; it applies convincingly only to a few simple cases where the explanandum is a quality that can be transmitted from one thing to another (p. 317).

> Forms are explanations, then, not because Plato always wants to find a use for Forms, but because only they do justice to the intuitive demand that something's being F cannot be explained by something which is the opposite of F, but can only be explained by citing something which is F, and indeed a *better* example of F than the thing being explained (p. 317; emphasis in original).

Annas supposes that Plato makes his character reject the accounts of the natural scientists because their explanations are not consistent with the so-called "intuitive demand" that causation is a transfer of properties. He accepts accounts in terms of Forms because they are consistent with this demand. Thus, if Annas's interpretation is correct, Plato took a bad idea about cause and effect and applied it in formal explanation:

> We are led to expect that he will <use the transference idea> to offer an improved account of causal explanation,

> but... what he offers is a very limited and idiosyncratic kind of formal explanation (p. 318).

According to Annas, Socrates's autobiography is not a record of an achievement. It is, rather, the record of an embarrassment. If Annas's interpretation is correct, Plato's tribute contains little more than confusion about explanation and causation.

I agree that Plato did not distinguish either different kinds of cause and explanation or different senses of the word αἰτία, but I deny that he is confused in a way that Aristotle could clear up with his Doctrine of the Four Causes. I also deny that Socrates turned away from the natural scientists for the confused reasons that Annas claims. The autobiography is a difficult text for modern readers, but Plato is not guilty of the confusion that she claims. Plato's primary concern is to help his readers realize that Socrates recognized that there is a question which is first in the search for knowledge, and that answers to this question do not figure in explanations according to the method of the Ionian scientists. This hardly amounts to an interest in kinds of cause and explanation, or in senses of the word αἰτία, but neither does it force Plato to conflate causal and formal explanations.

Just what method of inquiry the natural scientists employ is not very clear,[21] but despite Annas's suggestion, not all their explanations are clearly causal explanations. Aristotle, e.g., reports that Anaxagoras and his followers gave explanations of the following sort:

> Things, they say, appear different from one another and are said to be one thing rather than another because there is a numerical preponderance of that among the innumerable constituents in the mixture, for nothing is purely and wholly white or black or sweet, or bone or flesh, but that which it contains most, this is taken to be the nature of the thing (*Physics* 187b3-7).[22]

The nature of this Anaxagorean style of explanation is not evident, but it does not look too much like a causal explanation. It appears to be a logical explanation in terms of "constituents" for why things are "said to be one thing rather than another."

Furthermore, even if the natural scientists were trying to give causal explanations, Plato need not be guilty of conflating causal and formal explanations. He is trying to show his readers that Socrates recognized that, as philosophers, i.e., as inquirers in the search of knowledge, the scientists should be interested in his "What is F?" question and that explanations according to their method of intellectual inquiry are part of a conception of reality that does not contain an objective ground for answers to this important question.

There need be no conflation in Plato's mind on this point. With respect to matters involving the properties that Socrates asks about, Plato accepted Socrates's "method" (*μέθοδος* = *μετά* + *ὁδός*) of inquiry. He thought that if, in the place of Socrates's method, the natural scientists's method were accepted as the correct method of intellectual inquiry, then one would have to accept a conception of reality according to which knowledge about these matters would be impossible because the respective definitional knowledge would be impossible. The *Phaedo* contains Plato's tribute to Socrates for his part in this revolution. Plato explains that Socrates's dogged insistence on the priority of definitional knowledge constituted an important break from the natural scientist's way of searching for knowledge. Socrates decided to follow a new "way" (*ὁδός*) of inquiry "in the pursuit of" (*μετά*) knowledge, and Plato applauded him for his decision.

Although their interpretations manifest this problem in different ways, because they fail to understand Plato's reasons for discussing Socrates's break with the method of inquiry that the natural scientists use in their search for knowledge, Vlastos and Annas obscure Plato's reasons for concluding that the Forms are substances. Vlastos makes Plato assert that explanations according to the method of the natural scientists and according to the method of the philosophers are somehow two non-competing kinds of explanation, but Plato actually makes no such assertion. On the contrary, he makes his character argue for his explanations in terms of the definitional content of Forms by asserting that explanations according to the method of the natural scientists do not provide knowledge about matters involving justice, beauty, and other such properties. Annas seems to recognize that Plato's character argues for explanations in terms of the Forms over explanations according to the method of inquiry of the natural scientists, but she mislocates the source of his complaint against these scientists. She

makes Plato assert that the accounts of the natural scientists are inadequate formal explanations because they fail to conform with a certain conception of the nature of what Aristotelians would call "efficient causation." Again, however, Plato makes no such assertion. His complaint against the method of inquiry of the natural scientists does not really concern causation. Socrates's examples do suggest constraints on acceptable explanations, but his interest in these constraints does not stem from a concern with the nature of efficient causation. It stems, rather, from a concern with the possibility of knowledge about matters involving the properties that he asks about. Plato believes that the natural scientists's method of inquiry is part of a conception of reality that is inconsistent with the possibility of such knowledge. In their interpretations of the *Phaedo*, neither Vlastos nor Annas recognize this important point.

vi. The Forms exist in a third realm

The way that Plato developed Socrates's use of Forms has made trouble for him among philosophers as different in outlook and separated in time as Aristotle and Wittgenstein. Although Wittgenstein and the twentieth century analytic philosophers are interested in theories of the truth-conditions for certain statements, they insist that the only adequate such theories are theories in terms of sensible reality and the linguistic practices of language users. They insist, to make Michael Dummett their spokesman, that "uses" determine senses and that senses determine truth-conditions:

> The solution offered by analytical philosophy is that what constitutes the speaker's attaching a particular sense to a word is his *using* the word--more exactly, using sentences containing the word--in a particular way. In describing this use, we can take no advantage of a prior grasp of that sense by the speaker.... Furthermore, our account of his use of the word will, by itself, be a sufficient explanation of his grasp of its sense, that is, in non-Fregean terminology, of his grasp of the concept ([1981b], p. 52; emphasis in original).

> The first, most primitive, use of general terms is their predicative use in sentences whose subject is a demonstrative pronoun: and we may regard that part of their sense which determines the truth-conditions of such sentences as constituting their "criterion of application." It is only certain general terms--those which are the most fundamental in our language--which have such a use at all. For a general term to have such a use, it is necessary that we should be able to understand predication of it which does not relate to a determinate object, conceived as picked out by the use of a specific criterion of identity. Both 'smooth' and 'man' have such a use: 'narrow-minded' does not. We can understand what it is to predicate narrow-mindedness only when we are capable of grasping that it is to be predicated only of men, and therefore of knowing what it is to identify a man ([1981a], pp. 572-573).

Dummett and the analytic philosophers are united against the proposition that senses are metaphysical objects that determine the truth-conditions for statements. The analytic philosophers have made this point repeatedly. Perhaps Quine, however, has given this point its most well known statement:

> One may admit that there are red houses, roses, and sunsets, but deny except as a popular and misleading manner of speaking, that they have anything in common. The words 'houses,' 'roses,' and 'sunsets' are true of sundry individual entities which are red houses, red roses, red sunsets; but there is not, in addition, any entity whatever, individual or otherwise, which is named by the word 'redness,' nor, for that matter, by the word 'household,' 'rosehood,' 'sunsethood.' ... <One> is no better off, in point of real explanatory power, for all the occult entities which he posits under such names as 'redness' ([1948], p. 10).

> I feel no reluctance toward refusing to admit meanings, for I do not thereby deny that words and statements are meaningful. ... I remain free to maintain that the fact that a given linguistic utterance is meaningful (or *significant*, as I prefer to say so as not to invite hypostasis of meanings as

> entities) is an ultimate and irreducible matter of fact; or, I may undertake to analyze it in terms directly of what people do in the presence of the linguistic utterance in question and other utterances similar to it (p. 11; emphasis in original).
>
> <T>he explanatory value of special and irreducible intermediary entities called meanings is surely illusory (p. 12).

Other analytic philosophers, of course, had made the same point:

> If the meaning of an expression is not an entity denoted by it, but a style of operation performed with it, not a nominee but a role, then it is not only repellent but positively misleading to speak as if there existed a Third Realm whose denizens are Meanings. We can distinguish this knight, as a piece of ivory, from the part it or any proxy for it may play in a game of chess; but the part it may play is not an extra entity, made of some mysterious non-ivory. There is not one box housing the ivory chessmen and another queerer box housing their functions in chess games. Similarly we can distinguish an expression as a set of syllables from its employment. But its use or sense is not an additional substance or subject of predication. It is not a non-physical, non-mental object--but not because it is either a physical or mental object but because it is not an object. As it is not an object, it is not a denizen of a Platonic realm of objects (Ryle [1957], p. 263).
>
> The questions, 'What is length?,' 'What is meaning?,' 'What is the number one?,' etc., produce in us a mental cramp. We feel that we can't point to anything in reply to them and yet ought to point to something. We are up against one of the great sources of philosophical bewilderment: we try to find a substance for a substantive (Wittgenstein, *Blue Book*, p. 1). The mistake we are liable to make could be expressed thus: We are looking for the use of a sign, but we look for it as though it were an object *co-existing* with the sign. (One of the reasons for this mistake is again that we are

> looking for a 'thing corresponding to a substantive.') (p. 5; emphasis in original).

These philosophers suppose that making meanings be metaphysical objects and insisting that these objects do explanatory work is a mistake that leads to unnatural theories, and they assert that it is the mistake that underlies Plato's Theory of Forms. For these analytic philosophers, talk about "Platonic Forms," "Fregean senses," "Russellian propositions," etc., is acceptable only as long as one keeps firmly in mind that it is a way of talking about what actually does explain the truth-conditions for statements: the reality of sensibles and the linguistic practices of the community of language users.[23] If these philosophers are correct, Plato went wrong when he did not accept this fact about Forms and came to believe, in Quine's words, that the Forms are "special and irreducible" objects that are the essences of justice, beauty, and the other properties that Socrates uses his "What is F?" question to ask about. He went wrong when he concluded that Forms exist as substances in a third realm.

Although he probably did not intend to make a serious claim about the history of philosophy, Wittgenstein's remarks suggest an explanation for why Plato came to believe that the Forms are substances. The suggestion is that although Socrates was not wrong to focus attention on issues concerning definitional knowledge, Plato made a simple but disastrous mistake when he accepted the metaphysical belief that the Forms are substances. Because he failed to see that (the Greek counterparts) of 'beauty,' 'justice,' etc., are really just nominalized predicates, and not names of special objects, Plato fell to the desire "to find a substance for a substantive."[24]

To show that this interpretation is mistaken, one needs to find a passage in which Plato argues that the Forms are substances by arguing against an opponent who accepts a conception of reality in which essences are not starting-points. If he does not just note that his opponent fails see that (the Greek counterpart of) 'beauty,' 'justice,' etc., are names, this should dampen the enthusiasm for any interpretation that makes him come to believe that the Forms are substances because he was on the misguided quest "to find a substance for a substantive." Plato does not disappoint his supporters, as should already be clear from his discussion of Socrates's turn away from the

natural scientists.[25] Indeed, he argues for his belief in just about the way one should expect. He tries to eliminate competing conceptions of reality. Wittgenstein and other such commentators are unfair to Plato, and they distort the history of philosophy. On essences and how they fit into reality, these commentators are wrong to make Plato's belief that the Forms are substances stem from a simpleminded linguistic confusion. Plato is a better philosopher.

As I have emphasized, and now shall attempt to bring into sharper focus, the autobiography is a record of a clash between two very different conceptions of reality. The dispute, as Plato understands it, is over how reality must be so that there can be knowledge. Socrates convinces his interlocutors that the Platonic conception is the winner. On this conception of reality, the Forms exist as substances.

Although they have not made the connection to Plato's attempt to eliminate competing ontologies in which essences are not ontological starting-points, scholars do commonly cite the use of the phrase *αὐτὸ καθ' αὑτό* and its cognates with respect to the Forms as evidence that Plato believes that the Forms are substances. In his commentary on the *Phaedo*, e.g., David Gallop puts the point as follows:

> Plato writes of Forms, such as Equality, Largeness and Health, as if they existed "alone by themselves," in splendid isolation from the familiar world of equal sticks, large men and healthy children. It is this "separation" of Forms from the sensible objects that distinguishes the fully-fledged version of the Theory found in the *Phaedo*. Nowhere is the contrast drawn more sharply than here. The soul-body dualism already postulated (64e-65a) is one aspect of the same dichotomy ([1975], p. 94).

For stylistic reasons, perhaps, Gallop does not translate the phrase *αὐτὸ καθ' αὑτό* at 100b6 as 'alone by itself.' Instead, he uses 'itself by itself.' Gallop does, however, use 'alone by itself' to translate it in connection with the Forms at 78d5-6. He also uses this translation at 64c6 in connection with the soul, and perhaps he believes, reasonably enough, that Plato uses the phrase with roughly a single meaning.

Gallop does not explicitly justify his translation of this phrase, so I assume that he relies on the precedent set by John Burnet in his 1911

edition of the *Phaedo*. This masterpiece set the stage for subsequent scholarship.[26] Burnet renders the phrase αὐτὸ καθ' αὑτό at 64c6 as 'alone by itself,' and he asserts that "<t>he emphatic αὐτός often acquires a shade of meaning which we can only render by 'alone'" (p. 30). As evidence for this assertion, Burnet maintains that Plato uses the phrases μόνην καθ' αὑτήν and αὐτὸ καθ' αὑτό with the same meaning at 67d1 and 64c6. Burnet further maintains that 'alone' is the correct translation of the word μόνος as it occurs at 67d1.

Burnet may be correct that "<t>he emphatic αὐτός often acquires a shade of meaning which we can only render by 'alone,'" but 'alone' is not the only acceptable translation of the word as it occurs in technical contexts in the Platonic corpus. The word μόνος also occurs in contexts in which 'only' is an acceptable translation, and this rendering fits the context in the *Phaedo* and perhaps is even a better translation than 'alone.' Plato uses the phrases μόνην καθ' αὑτήν and αὐτῇ καθ' αὑτήν in "Socrates's Defense" (63e8-69e5). Socrates explains to his interlocutors why the philosopher does not fear death. He says that in death the philosopher is easily able to gain wisdom because the soul reasons best when it is not bothered by the body:

> <The soul> reasons best, presumably, whenever none of these things bothers it, neither hearing nor sight nor pain, nor any pleasure either, but whenever as much as possible αὐτῇ καθ' αὑτήν it becomes, disregarding the body... (65c5-8).

Socrates does not intend for his interlocutors to conclude that the those who wish to be true philosophers should try to exist without their bodies. This would be to urge suicide, and he stands back from this suggestion (61b7-62c8). Socrates's point is that the soul of the true philosopher tries to reason "only according to itself," not according to information that comes from the senses of the body.[27]

This translation fits Plato's use of the phrase αὐτὸ καθ' αὑτό with respect to the Forms, and his use shows that he believes that the Forms exist as substances. In connection with Forms, this phrase does not occur in the early dialogues. It first appears in this context in the middle dialogues. It occurs once in the *Symposium* at 211b1, but, as Sir David Ross has noted, the words are not Socrates's, but "are put

into the mouth of Diotima the wise woman of Mantinea, and their tone is that of a prophet rather than of a philosopher" ([1953], p. 21). The most important uses are in the *Phaedo* at 66a2, 78d5, and 100b6.

The last use is most telling. It occurs in a passage that occurs just before Socrates rejects the explanations according to the method of the natural scientists. He prefaces his rejection with an affirmation of the Platonic conception of reality. On this conception, the Forms exist "themselves according to themselves." Socrates remarks:

> I shall return to those much harped-on entities, and start from them, hypothesizing that a beautiful αὐτὸ καθ' αὑτό is something, and so are a good, a large, and all the rest (100b4-7).

Socrates next asks Cebes to "grant him this <hypothesis> and agree that those things exist" (100b7). Cebes, of course, satisfies this request (100c1-2), and Socrates draws out the consequences. He first says that the ordinary objects of experience are somehow posterior to the Forms, and he then asks Cebes whether as an explanation of why F-things are F, he accepts that the (A1) answer is the correct response to the preliminary (Q1) question:

> Then look what comes next to those things, and see if you think as I do. I believe that if anything else is beautiful besides the beautiful itself, it is beautiful because (διά) of nothing other than that it participates in that beautiful, and the same goes for all of them. Do you assent to an explanation (αἰτία) of this kind (100c3-7)?

Cebes accepts this kind of explanation (100c8), but in so doing, he does not just agree to accept explanations in terms of Forms that exist αὐτὰ καθ' αὑτά. He also agrees that no other kind of explanation is acceptable. He agrees to reject every method of inquiry that is part of a conception of reality that is inconsistent with the proposition that the Forms exist as substances and ontological starting-points.

This is what one should expect. Cebes just accepted that "a beautiful αὐτὸ καθ' αὑτό is something," that the beautiful itself "only according to itself" contains what it is to be beautiful. He just agreed,

to put the same point in a slightly different way, that a given thing is beautiful "because of nothing other than it participates in that beautiful." In case, however, Cebes fails to grasp the significance of the proposition that he accepts, Socrates quickly reveals its power. In 100c9-d8, as I have already shown, he outright rejects explanations according to the scientists's method of inquiry. Socrates announces that he "no longer understand<s> nor... recognize<s> those other wise explanations" (100d9-10) according to this method.

The early definitional dialogues and the autobiography in the *Phaedo* thus suggest that Socrates helped pave the road to Platonism and the Theory of Forms. He turned his back on the method of his predecessors, asked his "What is F?" question, made its answers necessary for knowledge, and located the answers in Forms. In the definitional dialogues, this stance manifests itself in the character's insistence on the priority of definition and his insistence on the priority of Form. In the autobiography, this character argues against his predecessors. He argues that if knowledge about matters involving certain properties is possible, then explanations in terms of the definitional content of Forms cannot be eliminated in favor of explanations according to the natural scientists's method of inquiry. He insists that neither this attempt nor any other attempt to eliminate the (A1) answer to the (Q1) question can provide for possibility of such knowledge. Plato is firmly convinced that only a conception of reality in which Forms exist as substances is consistent with the possibility of knowledge. He believes that only if the Form the F itself exists "only according to itself" do certain properties constitute the essence of F-ness and thereby insure that there are the definitional truths that are necessary for knowledge about matters involving F-ness.

Socrates and Plato were not the only intellectuals to react against the Ionians. Almost from the beginning of the naturalist tradition,[28] the scientists themselves recognized that the speculations of their Milesian forefathers must remain speculative unless certain epistemological issues could be resolved. Much of the evidence has not survived, or survived in only fragmentary form, but statements from Xenophanes, Heraclitus, etc., show that the thinkers of the day took a keen interest in the "methods" (*μέθοδοι* = *μετά* + *'οδοί*) for acquiring knowledge.[29] The Milesian cosmological speculations had disturbed the unreflective confidence in the orthodox conception of reality and the

place of humans in it. This helped to push questions about method to the forefront of discussion. The race was on to identify the method that would produce knowledge and to fit this method into a conception of reality, for only in this way could confidence in a given claim about the world and man's place in it be fully justified.

Parmenides's poem is an important milestone in this race. His thought is opaque, to say the least, but his work remains extremely important to scholars because it constitutes a dramatic and seminal turning-point in the early history of ancient philosophy. He attacked the very foundations of the naturalist movement, and his attack helped to open the way for Plato and his Theory of Forms. Plato does not acknowledge his debt to Parmenides, at least not in Socrates's autobiography, but there is an interesting parallel between the poem and this passage from the *Phaedo*. Parmenides's poem begins with a prologue and then opens into two parts, the way of "truth" (DK 28 B 1.29) and the way of "opinion" (30). In the prologue, Parmenides sets off on the "road of the god, which bears the man who knows over all cities" (2-3) to a place far "from the steps of men" (27).[30] Once there, the goddess distinguishes the two ways that are the subject of the remaining two parts of the poem. She distinguishes the way of "truth" from the way of "the opinions of mortals, in which there is no true reliance" (30). She insists that the "way of truth" is the only way to knowledge and that the "way of opinion" is somehow wrongheaded and inconsistent with the possibility of knowledge. Furthermore, and most importantly, she seems to identify the "way of opinion" with the way of the Ionian natural scientists. This seems to be the import of her remarks in the following passage:

> They made up their minds to name two forms, of which they need must not name so much as one--that is where they have gone astray--and distinguished them as opposite in appearance and assigned to them signs different one from the other--to one the aitherial flame of fire, gentle and very light, in every direction identical with itself, but not with the other; and the other too is in itself just the opposite, dark night, dense in appearance and heavy (B 8.53-59).

This passage is obscure and difficult, but the goddess seems to suggest that the Ionians have gone wrong in their attempt to make sensible objects, such as portions fire, air, etc., be basic parts of reality. Parmenides apparently believed that the scientists have fallen into a fantasy and out of touch with objective reality.[31]

In Socrates's autobiography, although he does not argue in the way that the goddess argues, Plato does proceed in a strikingly similarly fashion. He rejects the method of inquiry of the natural scientists. He suggests that this method is part of a conception of reality that is inconsistent with the possibility of knowledge. Like Parmenides's mortals, the natural scientists make assumptions that put them out of touch with reality and put knowledge beyond their reach. Plato insists on a conception of reality in which essences exist, and he locates them outside the human sphere and in the third realm of Forms. In no uncertain terms, he maintains that the (A1) answer is the only answer that is consistent with the possibility of knowledge. In parallel with Parmenides's journey, the (A1) answer is the "road of the god, which bears the man who knows over all cities."

In view of this parallel, no one should be surprised that Plato treats Parmenides with more respect than he treats anyone but Socrates. Plato continues the war against the natural scientists that Parmenides had begun. Parmenides thought that there are two "ways" (ὁδοί) to go "in the pursuit" (μετά) of knowledge, his way and the way of the natural scientists, but that only his way "attends upon truth" (B 2.2, 2.4), and that the way of the natural scientist is a dead end. Parmenides thought that his way carried a certain conception of objective reality, that this reality is somehow a "perfect one." In the autobiography in the *Phaedo*, like Parmenides before him, Plato rejects explanations according to the method of inquiry of the natural scientists. Plato only accepts explanations in terms of the Forms according to the method of inquiry that Socrates follows in the early definitional dialogues. Plato thought that Socrates's method of inquiry carried a certain conception of reality. Socrates's method presupposes that essences exist, and other than making them exist as ontological starting-points, he saw no other way to fit them into a conception of reality that he believed could account for the possibility of knowledge. Plato came to believe that Socrates's method of inquiry demanded an

ontology in which essences exist "themselves according to themselves." He concluded that the Forms must exist as substances.

vii. Forms and Recollection

Some scholars seem to suggest that Plato concluded that the Forms are substances, not for the reasons that I have put forward, but because he accepted the Theory of Recollection (Ανάμνησις). Whether they actually intend to make this suggestion is not completely clear, but there is no doubt that their words can leave this impression. Their words can leave the impression that the Theory of Recollection is a premise in Plato's argument for the conclusion that the Forms are substances. Myles Burnyeat, e.g., in criticizing Irwin's account of the origin of the Theory of Forms, makes the following remarks:

> So Plato's great metaphysical vision rests on nothing more than an unclarity or confusion? I would find that the hardest paradox of all. The truth is, there is an important dimension of Plato's thinking about these issues which Irwin has left out. ... I refer to Plato's provocative doctrine that, in morals and mathematics and perhaps in other branches of knowledge as well, learning is recollection, a recovery from within oneself of knowledge enjoyed by the soul before it became incarnate in a human body. ... My contention is that we shall not understand the Theory of Forms unless we see it as correlative to a cosmic vision of the soul's existence in which our present embodiment is but one passing phase ([1979], pp. 59-60).[32]

Burnyeat clearly rejects Irwin's interpretation, but his positive view about the development of Plato's thought is less clear. A reader could take him to assert that Plato concluded that the Forms are substances because he accepted the Theory of Recollection. This sort of suggestion is even stronger in some of F. M. Cornford's writing on the development of Plato's thought. Witness, e.g., his remarks in the following passage:

> When <Socrates> set out to define what Aristotle calls a 'universal,' such as the Beautiful, he must often have had

> occasion to draw the distinction, frequently pointed out in the early dialogues, between the single character to be defined and the many things which have that character... ([1939], p. 74). Socrates could draw that distinction, and perhaps must have drawn it, without out going on to assert that the Beautiful itself has a separate existence, independent of the many things in which the character appears (p. 74). Aristotle states quite definitely that the further step was taken by Plato, who gave these characters an independent existence and called them Forms (p. 74). The separation (χωρισμός) of the Forms is explicitly effected in the *Phaedo* (p. 74). It is entailed by the belief in Anamnesis. This is shown to involve the separate existence of a conscious and knowing soul, apart from the body and its senses, before birth--a conclusion which all parties to the discussion take as satisfactorily demonstrated, provided that the Forms exist. If a disembodied soul can know all reality and truth, the objects of its knowledge must exist apart from sensible things, such knowledge cannot come to it through the senses at all. Thus Anamnesis, the separate existence of the soul before birth, and the separation of Forms from sensible things, all stand or fall together. The whole of the first part of the *Phaedo* is designed to lead the reader to this conclusion (pp. 74-75).

Cornford first repeats what many accept, that Plato took a step beyond the Socratic position on the Forms. He then makes a slightly more controversial claim. He asserts that the Theory of Recollection commits Plato to this further step.[33]

Cornford is correct that Plato took a step beyond the Socratic position on how the Forms exist, but he makes this point in an unnecessarily misleading way. He employs the Aristotelian language of "universal" (καθόλου) and "separation" (χωρισμός) to state Plato's conclusion.[34] Cornford says that "<t>he separation (χωρισμός) of the Forms is explicitly effected in the *Phaedo*," and although there is a reading of the dialogue according to which Cornford is correct, his choice of words is somewhat unfortunate. By the time of the *Phaedo*, Plato has concluded that the Forms exist in a way that, later in the *Parmenides*, the young Socrates describes as being "apart (χωρίς)

themselves according to themselves (αὐτὰ καθ' αὑτά)" (129d7-8).[35] In the *Phaedo*, however, Plato never uses the word χωρισμός with respect to the Forms.[36] Aristotle describes the development of Plato's thought in terms of the "separation" of "universals," but this description is not one that Plato claims for himself.

A much more serious problem in Cornford's remarks, and possibly also in Burnyeat's remarks, is the strong suggestion that Plato reified the Forms into metaphysical objects because he accepted the Theory of Recollection. This interpretation of the development of Plato's thought has no support. There is no support for it in the Platonic corpus. Nor is there any support for this interpretation in the Aristotelian corpus. In his discussion of the origin of the Theory of Forms, Aristotle never mentions the Theory of Recollection.

This interpretation, furthermore, would reverse the natural order of explanation. The Theory of Recollection is the theory that the Socratic question-and-answer dialectic produces knowledge because the soul is remembering what it knew before it entered the body and when it was in "contact" (*Phaedo* 79d6) with the Forms. Plato accepts this analysis because, among other things, he believes that the Forms are substances. His belief in the Theory of Recollection is evidence that he believed that Forms are substances, but it is not a premise in his argument for the conclusion that the Forms are substances. Plato concluded that the Forms are substances, not because he accepted the Theory of Recollection, but because he believed that a conception of reality in which the Forms exist "themselves according to themselves" is the only way to provide for definitional truths to be possible objects of knowledge. The Theory of Recollection is logically posterior to Plato's conclusion that the Forms exist as substances. It explains why the Socratic question-and-answer dialectic can result in knowledge of the definitional content of Forms that exist in a third realm.

viii. Against Penner

In his book *The Ascent from Nominalism*, Terry Penner argues that Plato uses the "argument from incorrigible conceptual states" to argue that the Forms are substances (pp. 13-14, 20). He claims to find this argument in a passage that occurs well before Socrates's intellectual

autobiography. He maintains that this argument occurs in the *Phaedo* at 74a9-c5. As he translates it, this passage reads as follows:

> "We say, I suppose, that *equal* is something--speaking here not of stick [equal] to stick or of stone to a stone or of any other such things, but besides all these some other thing, the equal itself. Do we say that it is something or nothing?"
>
> "We do indeed say so, by Zeus," said Simmias, "assuredly so."
>
> "And do we know what it itself is?"
>
> "Yes," he said.
>
> "Where then did we get knowledge of it from? Surely from the things of which were just now speaking? Having seen sticks, stones or other such equals, we came to have this in mind *from* them, this being other than them.
>
> --Or does it not appear other to you? Look at it in this way too. Don't equal stones and sticks, the same ones, sometimes appear equal to one [man] and not to another?"
>
> "Yes, indeed."
>
> "What then? Have the equals themselves ever appeared unequal to you, or equality [ever appeared to be] inequality?"
>
> "Oh, never, Socrates."
>
> "Therefore they are not the same [thing]," Socrates said, "the equals and the equal itself."

Penner admits that this passage appears to contain an argument that presupposes the existence of the Form the equal itself, since it appears to contain an argument for the conclusion that this Form is not identical with any of the ordinary objects of experience that are equal,[37] but he insists that in this case appearances are deceiving. He maintains that Plato is actually arguing for the Forms by arguing against "the position we nowadays call 'nominalism'... that the only things that exist are concrete spatio-temporal objects such as people, sticks, stones and the like" (pp. 21-22), and he maintains that Plato uses an identity statement to formulate the nominalist position. Penner writes:

> It seems to me as plain as anything can be that sometimes, establishing a non-identity statement just *is* establishing an

> existence statement. To see why establishing the non-identity <that> the equal itself ≠ equal sticks, stones, etc., just is establishing the existence of the Form the equal itself, what you have to ask is: who is the enemy Socrates is shooting down (p. 60; emphasis in original).
>
> <I>t would not have occurred to Plato that it would be necessary to argue against any species of anti-metaphysician other than a nominalist. Constructivism and conceptualism are, from a genetic point of view, fall-back anti-metaphysical positions, once nominalism has been defeated by the appearance of Platonism or realism (p. xi).
>
> In fact in identities like these, what we're actually doing is *reducing* talk of equality... to talk of equal sticks and stones... (p. 61; emphasis in original).
>
> To say that the equal *besides* the sticks equal to sticks and stones to stones is *nothing* would be to assert the thesis of nominalism: to reduce any *equal* there may be to stick equal to stick, stone to stone and any other such things. To say it's something is say that nominalism is false (p. 62; emphasis in original).

On Penner's interpretation, Socrates takes his assertions in 74b7-c3 about the ways that equal stones and the Form the equal itself can and cannot appear to be premises in an argument from the incorrigibility of certain conceptual states for the conclusion "that equal is something, speaking not stick to stick or of stone to stone...."

Although perhaps someone could argue as Penner claims, there is not much evidence that Plato actually does argue this way in 74a9-c5. To show that he is making an assertion about "incorrigible conceptual states" is itself a non-trivial task, but an even more formidable task is to show that Plato argues that the Forms are substances by arguing against an identity statement. Penner must show that, when Socrates asks whether the equal itself appears to him to be "other" (ἕτερον, 74b7) than the many equals, he is really asking whether talk about equality can fit into a nominalist ontology. Penner must show that, when Socrates concludes that the equal itself is "not the same" (οὐ

ταὐτόν, 74c4) as the many equals, he is really concluding that talk about equality cannot fit into a nominalist ontology.

As evidence for his interpretation, Penner cites 476c2-7 in book V of the *Republic*. This passage occurs in the context of Socrates's discussion of the philosopher and his competitor, the lover of spectacles. To determine who is fit to rule, Socrates makes these two face a challenge. The challenge, according to Socrates, shows that only the philosopher can know of a given "city" (πόλις) that it is just, and the reason is that only the philosopher accepts an ontology that is consistent with the possibility of knowledge about matters involving justice. In the passage that Penner cites, which occurs before the Socratic challenge, Plato is kicking a little mud on his opponent. He stigmatizes him as a dreamer:

> As for the man who believes in beautiful things but not in the existence of beauty itself, nor is able to follow one who leads him to the knowledge of it, do you not think that his life is a dream rather than a reality? Consider: is this not dreaming, namely, whether asleep or awake, to think that a likeness is not a likeness but is that which it resembles?
>
> I certainly think, Socrates, that the man who does this is dreaming (476c2-8).

Penner maintains that Plato believes that the lover of spectacles is "dreaming" because he accepts a certain identity statement:

> <W>hat the lovers of sights and sounds say to themselves in their so-called 'dream state' is obviously just this: the beautiful itself is identical with the many beautiful sights and sounds. But since... the lovers of sights and sounds *don't believe in the beautiful itself* [476c2-3],... what possible interpretation can we give to what the lovers of sights and sounds say to themselves in their dream--the beautiful itself is not identical with the many beautiful sights and sounds--if not precisely the nominalistic claims: that all there is to this so-called 'beauty itself' is just the many beautiful sights and sounds (pp. 63-64; emphasis in original).

Penner maintains that the passage from the *Republic* confirms his interpretation that, in the *Phaedo,* Plato is arguing that the Forms are substances by arguing against an identity statement (p. 64), but it actually provides no such confirmation.

If Plato used an identity statement to express the position that he associates with the lover of spectacles, then perhaps the passage from the *Republic* would constitute evidence for Penner's interpretation. Plato, however, does not use an identity statement in this passage. To characterize the positions of the philosopher or the lover of spectacles, he never uses (Greek counterparts of) 'other' or 'same' in identity statements in any passage in the discussion. Not only does he not use an identity statement, when Plato says that the lover of spectacles "think<s> that a likeness is not a likeness but is that which it resembles," he need not be understood as attributing a belief in some nominalistic identity. He may mean, and probably does mean, nothing more than that the lover of spectacles denies that the ordinary sensible objects of experience are "likenesses" of substances. To Plato's dismay, the lover of spectacles supposes that these ordinary objects are what is most real, that they are the substances.[38]

Another problem for Penner is that to extract the "argument from incorrigible conceptual states," the reader has to overlook a more natural reading of the passage. On this reading, Socrates begins with an existence claim, that the Form the equal itself exists. After his interlocutor agrees to this existence claim, Socrates asserts that they "know what it itself is." His interlocutor again agrees, and Socrates turns the conversation to the events that help cause the incarnate soul to have this knowledge. He suggests that it comes from seeing equal things. He eventually explains that this knowledge comes from seeing equal things because this makes the soul recollect the Form, but before he gives this explanation, he pauses to ask whether the equal itself "is other than" the ordinary objects of experience that are equal. Before his interlocutor can respond, Socrates argues that the equal itself, something that they agree exists, has a property that distinguishes it from all the ordinary objects that are equal. In this way, to forestall confusion on an issue that was new to the ancient world, Socrates emphasizes that although the Form the equal itself and the many ordinary objects that are equal have in common the (Greek counterpart

of) the word 'equal,' the many equals and the one Form the equal itself are nevertheless objects that are very different in kind.

This interpretation is consistent with other parts of the *Phaedo*. At 74dff., e.g., Socrates again helps his interlocutors see that although the Form and the equal stones and equal sticks, etc., have a name in common, they are objects different in kind. He helps them see that the many are not "equal in just the way that itself which is <is equal>" (d6), but rather "fall somewhat short of that" (6-7), and are not quite "such as to be as the equal <is equal>" (7).[39] Furthermore, 74a9-c5 occurs in a passage in which Socrates is trying to prove that the soul exists before it enters the body, and in the summary of this argument at 76d7ff., neither he nor his interlocutors show any indication that earlier they concluded that the Forms are substances. Socrates notes that the soul exists pre-natally if, and only if, the Forms are substances, and instead of reminding Socrates that they have already established that the Forms are substances, as one might expect if Penner's interpretation were correct, he says only that he recognizes the truth of the Platonic conception of reality.

Although I am steadfastly in agreement with Penner's attempt to give Plato an argument "that he could have had in mind" (p. 44),[40] and I believe that his interpretation is intriguing, I do not believe that there is sufficient evidence to conclude that Plato argues for his belief in either the way or the place that Penner claims. He does not argue that the Forms are substances and that nominalism is false by arguing against an identity statement on the basis of the premise that some of his conceptual states are incorrigible. He does not argue this way in the *Phaedo* at 75a9-c5. Nor does he argue this way anywhere else in the corpus. On these points, Penner is mistaken. Plato's argument occurs in the place one might expect. It occurs in Socrates's intellectual autobiography. Plato's argument is consistent both with his place in history and with Socrates's insistence on the priority of definition and the priority of Form in his search for knowledge. Plato accepted explanations in terms of the definitional content of Forms according to the leading assumptions in Socrates's method of intellectual inquiry. He came to believe that these assumptions are part of a conception of reality in which essences are starting-points, and he came to believe that explanations according to a method that does not incorporate these assumptions is part of a conception of reality that is

inconsistent with the possibility of knowledge. The first explanations to go down under this burden are the explanations according to the method of inquiry of the natural scientists.

3

PHILOSOPHERS AGAINST LOVERS OF SPECTACLES

i. Introductory remarks

In book V of the *Republic*, in his discussion of the philosopher and the lover of spectacles, Plato again argues that the Forms are substances. His argument runs parallel to his earlier argument against the natural scientists. The philosopher accepts the ontology that Socrates defends in the *Phaedo*. The lover of spectacles[1] opposes the philosopher. The lover of spectacles accepts an ontology in which essences are not starting-points. Instead of Forms that exist "themselves according to themselves" (*αὐτὰ καθ' αὐτά*), he accepts "the many conventions (*νόμιμα*) of the many." Socrates argues against this ontology. He argues that it is part of a conception of reality that is inconsistent with the possibility of knowledge.

ii. The Socratic challenge

The argument against the lover of spectacles occurs as part of Socrates's defense of one of the most stunning assertions in the corpus: that "cities will have no respite from evil... unless philosophers rule as kings" (473c11-d6). Glaucon voices disbelief, and to show that only the philosopher is fit to rule, Socrates makes the philosopher and his competitor, the lover of spectacles, face a challenge. Socrates throws down this challenge to establish that only the philosopher accepts a conception of reality according to which an inquirer can know of a given *πόλις* whether it is just. He intends to use this proposition as a premise in an argument for the conclusion that only the philosopher is fit to rule. Only the philosopher, Socrates argues, accepts a conception of reality such that one "can keep looking back and forth, to justice, beauty, temperance, and all such things as by nature exist, and can compose human life with reference to these..." (501b1-4).

The challenge to the lover of spectacles is to show that his ontology is part of a conception of reality that is consistent with the possibility of knowledge about matters involving justice and the other properties that the philosopher uses the "What is F?" question to ask about. The lover of spectacles denies that the Forms are substances. This is part of what it is to be a lover of spectacles (476a9-d4). Socrates again emphasizes this difference between the philosopher and the lover of spectacles, and then he presses his challenge. He presses the lover of spectacles to answer certain questions:

> I want a word with, and an answer from, the good fellow who does not believe in a beautiful itself or any Form of beauty itself, which remains eternally the same as itself, but who believes in the many beautiful things, this lover of spectacles who will not suffer anyone to say that the beautiful is one, and so with the just and the rest (478e7-479a5).

The questions concern the many things that are beautiful, just, and pious. In the case of beautiful things, Socrates asks whether the lover of spectacles can avoid concluding that these things are also ugly. He asks a similar question about just actions and pious actions:

> My dear sir, we shall say to him, of all those many beautiful things, is there one which will not also appear ugly? And is there one of those just actions which will not also appear unjust? And of pious actions, is there one that will not appear impious (479a5-8)?

Glaucon gives Socrates the answers that he expects. Glaucon responds, without explanation, that the lover of spectacles cannot avoid these conclusions:

> No, for inevitably those will in a way appear both beautiful and ugly, and so with the other things included in your question (479b1-2).

This answer, of course, settles the challenge against the lover of spectacles. If, with respect to ordinary objects that are F, the lover of

spectacles must conclude they are not-F, then clearly he does not know whether any such object is F. To emphasize the point, however, Socrates continues his questioning:

> What about the many things that are double? Do they appear any less half than double?
> Not one of them.
> And big, small, light, and heavy, would we say that no more will one of these be said than its opposite?
> No, but always each will have both (479b3-8).

Socrates is now content to draw his conclusion:

> And so is each of the many things more than it is not that which one says it to be? This is like those double meanings one is entertained with at banquets, such as the children's riddle about the eunuch and his throw at the bat, the riddle whose answer tells what he hit it with and what it was sitting on. For these things too play both sides, and one cannot deem clearly that they are or are not or that they are both or neither (479b9-c5).

Socrates concludes that, in not recognizing that the truth of the Platonic ontology, the lover of spectacles commits himself to a conception of reality according to which no one can know how a given ordinary object of experience stands with respect to F-ness. The philosopher can look to the Form for the properties that determine F-ness. The lover of spectacles must look elsewhere, and Socrates believes that there is no place for him to look. He believes that, in not accepting a third realm of Forms, the lover of spectacles is forced the absurd result that every given ordinary object of experience is both F and not-F.[2]

In the place of a third realm of Forms, the lover of spectacles accepts "the many conventions (*νόμιμα*) of the many." Plato rejects this ontology as a way to ground essences in reality. This is evident from Socrates's subsequent comments. After pressing his questions, and receiving the incriminating answers, Socrates concludes that the lover of spectacles is not a knower, but is an "opiner" or a "fancier."[3] These epistemological titles fit the lover of spectacles because his

conception of reality eliminates the ground for knowledge, and leaves room for nothing more than "opinions" or "fancies" (*δόξαι*):

> We have found that the many conventions (*νόμιμα*) of the many concerning the beautiful and the others are rolled around between what is not and what really is.
>
> We have.
>
> But we previously agreed that if anything of that kind appears, it would have to be called opinable, not knowable, because it is that which is captured wandering in between being and not being by the intermediate faculty.
>
> We did.
>
> Therefore, those who gaze upon the many beautifuls and do not see the beautiful itself, and are not able to follow another who would lead them to it, who see many just actions but not justice itself, and so with everything, these people, we shall say, opine everything and know none of the things they opine.
>
> Of necessity.
>
> What about those who in each case contemplate the things themselves which are always in every way the same? Do these have knowledge, not opinion?
>
> That too necessarily follows (479d3-e9).

The lover of spectacles chooses *νόμιμα* over essences that exist as substances, and Socrates concludes that such an ontology is part of a conception of reality that is inconsistent with the possibility of knowledge. The challenge reveals, at least to Plato's satisfaction, that the lover of spectacles is an opiner, not a knower.

The clash between the philosopher and the lover of spectacles is a clash between two conceptions of reality. The philosopher accepts a conception of reality according to which Forms exist as substances. He insists that the Form the F itself exists "itself according to itself" (*αὐτὸ καθ' αὑτό*) and contains that which makes F-objects be F. In the search for knowledge, the philosopher gives the (A1) answer to the preliminary (Q1) question. The lover of spectacles accepts a very different conception of reality. Unlike the philosopher, the lover of spectacles gives

(S) The many "conventions" (*νόμιμα*) about F-ness

as the answer to the (Q1) question. The lover of spectacles accepts a conception of reality in which essences do not exist as substances, but must find their place in nothing more than conventions.[4]

Socrates argues that these different conceptions of reality have different consequences for the possibility of knowledge about matters involving justice. The challenge for the philosopher and the lover of spectacles is to mark certain properties as the essences of justice so as to provide for the possibility of knowledge about matters involving justice. Because the philosopher accepts the Platonic view that essences are starting-points, Socrates allows that he meets this challenge. The lover of spectacles, however, is not so fortunate. Because he explains essences in terms of conventions, Socrates insists that he fails to meet this challenge. Socrates argues that this way of incorporating essences into reality is inconsistent with political knowledge.

Socrates states his argument very quickly, but he makes the central premises clear enough. In the early definitional dialogues, on matters involving justice, beauty, etc., Socrates insists on the priority of definition. He insists that knowledge is possible only if definitional knowledge is possible. Plato accepted this principle. He further believed that the (S) answer to the (Q1) question eliminates the possibility of definitional knowledge. He believed that if the "many conventions of the many" about F-ness were to replace the one Form the F itself, then instead of the one objective definitional truth that had its source in this Form, there would be many "opinions, or "fancies," that masquerade as definitional truths. If, instead of the one definitional truth, there were these many ersatz definitional truths, each specifying different properties as the essence of F-ness, then the ordinary objects would be both F and not-F. Plato believed, and tries to demonstrate, that with respect to a conception of reality in which essences are not starting-points, knowledge is impossible.

iii. An argument from knowledge

Socrates's argument against the lover of spectacles is part of an argument for the conclusion that the Forms are substances.[5] The Socratic method of inquiry presupposes that political knowledge, e.g.,

is not possible unless justice has an essence. Plato thought that the Form the just itself is this essence and that it exists as an ontological starting-point. He reasoned that if there were only the "many conventions" about justice, then in reality justice would have no essence, and although language users could fancy themselves as speaking truths about matters involving justice, in reality no such statement would have a truth value, and political knowledge and expertise would therefore be impossible.[6]

This sort of argument informs many passages, including Socrates's autobiography in the *Phaedo*, but perhaps no such passage is more famous than the one at the end of the first part of the *Parmenides*. The young Socrates has made a poor showing against Parmenides's arguments against the Theory of Forms, but Parmenides concedes the need for Forms:

> If, Parmenides continued, in view of all these difficulties and others like them, a man refuses to admit that Forms of things exist or to distinguish a definite Form in every case, he will have nothing on which to fix his thought, so long as he will not allow that each thing has a character which is always the same, and in doing so he will completely destroy the power of discourse. But of that consequence, Socrates, I think you are only too well aware (135b5-c3).[7]

Parmenides admits, and is "only too well aware," that anyone who denies that the Forms are substances will thereby "destroy the power of discourse." Neither character elaborates, but readers of the middle dialogues should know what "power" they have in mind. Plato believed that anyone who denies that the Forms exist as substances must admit that about certain matters no one can use language as a vehicle to assert truths.[8] Plato's readers should know that he believed that if essences must find their place among "the many conventions of the many," then, in words from Aristophanes's *Clouds*, as Pheidippides learns from the sophists and urges in argument against his father, what passes for truth about matters on justice is nothing more than the fancies of those who manage to "talk over the crowd" (1422).

Although his opponents are the natural scientists, not the sophists, Plato presses essentially the same argument in a well known passage in

the *Timaeus*.[9] His character, Timaeus, asks whether Forms exist "themselves according to themselves" or all the talk about Forms is somehow nothing more than words:

> Is there such a thing as Fire just in itself, or any of the other things which we are always describing in such terms, as things that exist themselves according to themselves (αὐτὰ καθ' αὑτά)? Or are the things we see, or otherwise perceive by the bodily senses, the only things that have such reality, and has nothing else apart from these any sort of being at all? Are we talking idly whenever we say that there is such a thing as an intelligible Form of anything? Is this nothing more than a word (51b7-c5)?

Given the difficulty of the issues involved, and the importance of the Theory of Forms, one might expect Plato to make Timaeus proceed very patiently. Instead, Plato is content to have him settle the question quickly in remarks that seem to presuppose familiarity with prior dialogues:

> If intelligence (νοῦς) and true opinion (δόξα ἀληθής) are two different kinds, then these things--Forms that we cannot perceive but only think of--certainly exist according to themselves, but, if, as appears to some, true opinion in no way differs from intelligence, then all things we perceive through the bodily senses must be placed as the most established (51d3-7).

> Now we must affirm that they are two different things, for they are distinct in origin and unlike in nature. The one is produced in us by teaching, the other by persuasion; the one is always by a true account, the other is without an account; the one cannot be shaken by persuasion, the other can be won over; and true belief, we must allow, is shared by all mankind, intelligence only by the gods and a small number of men (51e1-6).

The central issue is whether "intelligence" and "true opinion" mark a genuine distinction and whether it entails that the Forms exist as substances. Plato is confident that this distinction is genuine and that

it does entail that the Forms exist as substances, but he does little to help his readers to share his confidence. In earlier dialogues, however, especially in the *Gorgias*, Plato supplies the information necessary to appreciate the force of his reasoning.

The *Gorgias* is one of the dialogues in which Plato distinguishes Socrates's philosophical practice from the practices of the sophists. As in book I of the *Republic*, so also in the *Gorgias*, Socrates faces a series of opponents and bests them all. His opponents are three sophists: Gorgias, Polus, and Callicles. Each represents a position within the sophistical movement. Gorgias is the oldest sophist. He claims to be an "expert" in the "art" of "oratory" (449a3-5), and Socrates presses him for an explanation of the nature of oratory. Gorgias responds that "oratory is a producer of <the kind of> persuasion that is a disposition for trusting, not a fitness for teaching" (455a1). He responds that "the orator is not fit for teaching..., but is fit only for persuading" (455a2-5). To illustrate the orator's ability, Gorgias gives the following illuminating example:

> Many a time I have gone with my brother or with other doctors to call on some sick person who refuses to take his medicine or allow the doctor to perform surgery or cauterization on him, and when the doctor failed to persuade him, I succeeded by means of no other art than oratory (456b1-5).

In this example, Gorgias portrays the orator as "persuader" who is not a "teacher." The orator can persuade the layman to accept a given proposition, but does not use the force of reason. He persuades him in some way other than by teaching him the justification that the expert has for believing that the proposition is true.

Socrates agrees with Gorgias's characterization of oratory, but he does not conclude that it is necessarily an evil practice. He explains that oratory, as Gorgias describes it, is a set of devices that aim to provide the confidence that can make belief appear as knowledge, but it does not provide the justification that makes true belief be knowledge (458e6-459c2). For disciplines, such as medicine, with respect to which recognized experts exist, Socrates allows Gorgias's suggestion that the orator provides a community service by convincing lay persons

to accept certain propositions. For other disciplines, however, Socrates suggests that the effect of the orator is less salutary. In the case of politics, e.g., a discipline that he believes has few real experts, the orator actually appears to the many to be the expert and the teacher. The orator may even appear to himself to be the expert and the teacher about matters involving justice. Perhaps because Socrates is there to refute him, Gorgias does not show himself to suppose that he is such an expert. He does not go so far as to claim "to know what is just" (461b6), but Plato firmly plants the suspicion that Gorgias is not always so reticent and that he and the sophists sometimes mistake the power of the spoken word for the force of reason.

The *Meno* reinforces this suspicion. In this dialogue, which in the traditional ordering is later than the *Gorgias*, one of Gorgias's former students assumes that he does have such knowledge. The student is Meno. He assumes that Gorgias knows what virtue is, and he assumes that when Gorgias was in Athens, he told Socrates what virtue is (71b9-d2, 73c6-8, 76a9-b1). Socrates recalls meeting with Gorgias, but he jokes that he cannot remember whether Gorgias told him what virtue is,[10] and he asks Meno to "remind" (ἀνάμνησις) him what Gorgias said (71c10). Meno cannot remember, and after much discussion, and in one of the most celebrated passages in the corpus, Socrates notes that "true opinions... run away... until someone ties them down by recollection." The passage reads:

> True opinions are a very fine thing as long as they stay in their place..., but they are not willing to stay in their place for a long time, but run away out of a man's soul, so they are not worth very much, until someone ties them down by working out the explanation (αἰτίαν). This, my friend, Meno, is recollection, as we agreed in what we said before. When they are tied down, they first of all become pieces of knowledge, and then permanent; and it is for this reason that knowledge is more valuable than right opinion, and it is by being tied down that knowledge differs from right opinion (97e6-98a8).

Socrates leaves Meno to conclude that Gorgias hoodwinked him. He leaves him to conclude that Gorgias provided him with a belief and the

confidence that makes this belief, if true, appear as knowledge, but he did not actually give him knowledge.

Where Socrates sees trickery and ersatz justification, Polus and the younger generation of sophists see nothing of the sort. They insist that justification is nothing but the power of the spoken word. This is clear in the second part of the *Gorgias*. After Polus takes the place of his defeated master, Socrates again focuses the discussion on the nature of oratory. Polus turns the question back to Socrates, who is only too happy to answer it. He replies that oratory is "flattery" (464e2), that it is an "idol" (εἴδωλον) of the part of politics that is concerned with justice, as opposed to legislation (463d1-2, 465c1-3). The orator, he says, "lacks intelligence (νοῦς)" (466e10), and he challenges Polus to "refute" him and "prove that orators do have intelligence, and that oratory is... not flattery" (466e13-467a1).

Plato believes that oratory appears like the part of politics concerned with justice, but it actually falls short of this discipline. He allows the orator a place in society, but insists that it is strictly subservient to those who have knowledge, such as doctors and politicians. Gorgias stands on the border of his place, but Polus transgresses his station, and later when Callicles urges Socrates to give up philosophy (484c4-485e2) and to engage in practices that "give a reputation for wisdom" (486c5-6), he is way out of bounds.

Plato thought that Polus and Callicles constitute a dangerous threat because they do not recognize their rightful place. They pass themselves off as having political knowledge, but they actually possess nothing more than the power of the spoken word. Unlike those who really have political knowledge, the sophists do not possess the force of reason.[11] Polus tries to claim that orators know "what is just, what is beautiful, and what is good" (461b6), but Plato leaves his readers to conclude, and no doubt intends them to conclude, that Polus is badly mistaken. The orator might acquire a true belief about justice, and he might instill both this belief and the confidence that makes it appear as knowledge, but in reality this belief is not knowledge. Plato describes it is an "idol" of knowledge. It has no "account" (λόγος, 465a3) and is held "irrationally" (ἀλόγως, 501a6).[12] In Socrates's words from the *Meno*, it is not "tied down" to the Form.

The *Gorgias* thus suggests that the distinction in the *Timaeus* between "true opinion" and "intelligence" depends on Forms that exist "themselves according to themselves" because it is a distinction between true belief and a certain conception of knowledge. With respect to justice, beauty, etc., Plato believed that knowledge is possible only if in a third realm there are Forms for inquirers to recollect. Recollection retrieves the definitional truths that he believes are a necessary part of the justification that is necessary for such knowledge, and recollection is possible only for the philosopher. Only the philosopher, according to Plato, can have νοῦς.

When Polus insists that Gorgias is wrong, and that orators do know "what is just, what is beautiful, and what is good," he not only denies the (A1) answer to the (Q1) question, but he denies that the Forms are substances, and thereby collapses the distinction between true belief and intelligence. Plato understood Polus and the younger sophists to advocate a conception of reality according to which there is no ground for a distinction between true belief and knowledge. On this conception of reality, justice is a matter of taste. It is subjective. It is something that is not subject to error. What passes for truth is merely the subjective fancy of those who "talk over the crowd."

Plato insisted that in the hands of Polus and the younger sophists, oratory becomes "flattery" and an "idol" of the part of politics that is concerned with justice. Plato thought that this flattery is the tool that the lover of spectacles would use to rule the πόλις. His ontology constrains him to hold that political expertise is nothing more than such flattery. He must rule according to "fancies," which, according to Plato, are all that is possible once one rejects Forms that exist "themselves according to themselves" and thereby collapses the distinction between knowledge and true belief. Without their metaphysical supports, all that remains is fancy.

Plato believed that only those who suppose that the Forms are substances, the philosophers, not the lovers of spectacles, can distinguish knowledge and true belief. Those who deny that the Forms are substances must believe, as Plato says in the *Timaeus*, that "true opinion in no way differs from intelligence." They have no choice, according to Plato, because they eliminate the only way to ground this distinction in reality. They are not philosophers. They are not lovers of wisdom. They are nothing more than opiners and flatters.[13]

iv. The lover of spectacles

In book V of the *Republic*, Plato matches his position on the truth-conditions for statements that predicate beauty, justice, etc., against the position of the lover of spectacles. He believes that the lovers of spectacles somehow make these truth-conditions relative to "conventions" and either intentionally or unknowingly commit themselves to a conception of reality that eliminates the possibility of knowledge and expertise. Plato thus characterizes the lovers of spectacles, not as philosophers, but as "lovers of opinions" (φιλοδόξαι):

> Shall we then say that these love and welcome that with respect to which knowledge is possible, as the others do that with respect to which only opinion (δόξα) is possible? Do we not remember that we said that these latter loved and contemplated beautiful sounds and colors and such things, but they would not allow that beauty itself was something?
>
> We remember.
>
> We shall then not be out of line if we call them lovers of opinion rather than lovers of wisdom. Will they be very angry with us for calling them that?
>
> Not if they take my advice, for it is not right to be angry with those who speak the truth (479e10-480a10).

Later in the *Republic*, just as the reader should expect, the lovers of opinions appear as sophists. They are the real target. The many thought that the sophists were better suited to ruling than the philosophers, and many of the sophists agreed.

Plato, of course, had a very different idea. He denied that the sophists were fit to rule because he believed that their philosophical commitments eliminated the possibility of political knowledge. He writes:

> Not one of those private paid teachers, whom the people call sophists and consider to be their rivals, teaches anything different from the confident opinions (δόγματα) which the many opine (δοξάζω) whenever they are gathered together, and this he calls wisdom. It is as if its keeper studied the

> moods and desires of a mighty and powerful beast, how to approach it, how to handle it, how it becomes most difficult and most gentle and what makes it so, what sounds it utters on each occasion, and what sounds addressed to it soothe or anger it. Having learned all this by tending the brute over a period of time he calls this wisdom, gathers this information together as if it were an art (τέχνη), and turns to teaching (διδασκαλία). The truth is that he knows nothing about these beliefs and desires, as to which of them is beautiful or ugly, good or bad, just or unjust, but he gives them these names in accordance with the brute's fancies (δόξαι). What it enjoys he calls good, what angers it he calls bad, and he can give no other account (λόγος) of them. What he must do, he calls just and beautiful, but he has never observed, nor can he show to another, the nature of the necessary or the beautiful or the difference between them (493a6-c6).

Plato associated the sophistical movement with a metaphysical and epistemological position that he thought was false and dangerous. The sophists, as he understood them, committed themselves to the philosophical position that the truth-conditions for statements that predicate justice, beauty, etc., rest on δόγματα.

This position is some kind of anti-realism about the truth-conditions for statements that predicate the properties that Socrates uses his "What is F?" question to ask about. The evidence does not determine the exact kind of anti-realism, perhaps because the sophists were not very self-conscious about their philosophical commitments, or perhaps because Plato was not too interested in setting out their position in detail, but certainly the main contrast between the philosopher and the lover of spectacles is clear enough. The lover of spectacles maintains that the essence of justice, beauty, etc., are not ontological starting-points. He maintains that these essences do not have their source in a third realm of Forms, but rather must find their place among nothing more than "the many conventions of the many."

Given his assertion that Plato uses the "argument from incorrigible conceptual states" to ascend from nominalism, Penner believes that the lover of spectacles is some kind of anti-realist, but he also believes that the text and Plato's position in history determine the exact kind of

anti-realism. Penner, recall, insists that Plato would not have thought to argue against any opponent other than the nominalist. If Penner is correct, then Plato's use of the word *νόμιμα* at 479d4 should be understood in a way that is consistent with nominalism. As Penner notes, unless Plato uses this word to refer to "particulars" the lover of spectacles cannot be a nominalist:

> For the many conventions (*νόμιμα*) referred to here as what the many identify beauty with, have seemed to some scholars to refer not to particulars but rather to types or kinds. On such a reading, the many (whom we see from the context to be the lovers of sights and sounds) will not be nominalists. The many will be identifying beauty with the many different characteristics conventionally thought to be identifiable with beauty, for example, the color turquoise, certain characteristics of shape and so forth (pp. 235-236).

Penner supplies the nominalist reading as follows:

> <The "conventions" (*νόμιμα*) at 479d4 are> the many things (plural) *thought to be what beauty is* (singular). And the identity between <a> single entity and many entities is of course just that which the nominalist requires" (p. 236; emphasis in original).

On his interpretation, the lover of spectacles is the sort of anti-realist who explains away all apparent references to conventions as a disguised way of talking about the mental processes of individuals. This is consistent with Penner's conjecture about the opponents Plato would have had in mind, and it is consistent with his claim that Plato uses an "argument from incorrigible conceptual states" to argue for the Forms by arguing against "the position we nowadays call 'nominalism'... that the only things that exist are concrete spatio-temporal objects such as people, sticks, stones and the like."

I agree that depending on how the lover of spectacles construes talk about "conventions," as well as talk about "fancies" and "opinions," he could be construed as either a nominalist or a conceptualist,[14] but that is where my agreement ends. I deny that Plato ever uses an argument from incorrigible conceptual states to show that the Forms are

substances, and I reject Penner's basic premise that Plato is trying to ascend from nominalism. I do not, therefore, have to press the *Republic* for the lover of spectacles's views on ontological commitment. Even if it contained an answer,[15] to focus on this question would turn one's attention away from a more important question.

In Socrates's autobiography in the *Phaedo*, Plato rejects explanations according to the method of the natural scientists, not because they are nominalist explanations, but because they are part of a conception of reality that is inconsistent with the possibility of knowledge about the matters in question. Although his reasoning is not very explicit, Plato seems maintain that any ontology that takes sensible objects as its starting-points can provide no foothold for the existence of essences. The reader can ask exactly what ontological status the natural scientists claimed for essences, but to understand the genesis of the Theory of Forms, the more relevant question is why does Plato believe that the explanations that fall out of the natural scientists's method of inquiry do not provide knowledge.

The same is true with respect to explanations according to the method of the lovers of spectacles. In book V of the *Republic*, Plato rejects explanations according to this method of intellectual inquiry, not because they are nominalist explanations, but because they do not provide knowledge. Whether the lover of spectacles is a nominalist or a conceptualist about *νόμιμα* is an interesting question, and Penner may have the correct answer, but to understand why Plato came to believe that the Forms are substances, the more relevant question is why he believed that these *νόμιμα* are insufficient to provide for anything more than subjective fancies and opinions. The answer to this question cannot simply be that the lover of spectacles is a nominalist and that Plato rejected nominalism any more than it can be that he is a conceptualist and that Plato rejected conceptualism.

The evidence in the *Republic* is not easy to evaluate, but it does suggests a plausible answer. It suggests that Plato thought that *νόμιμα* can provide for nothing more than fancies because no one of the many *νόμιμα* about F-ness can rise above the fray to be the one "by which" F-things are F. Plato thought that, since "the many conventions of the many" are really nothing more than the many claims about justice, beauty, etc., that the many shout when they are together in a mob, and

since the many are always shouting contradictory things, there are always equally qualified but incompatible conventions.

If Plato had this belief about "the many conventions of the many," it would explain why he believed that the lover of spectacles cannot know whether a given πόλις is just. The lover of spectacles denies that essences exist as substances and starting-points. He tries to understand claims about justice, beauty, etc., in terms of the many conventions of the many. He supposes that these conventions determine the truth-conditions for statements that predicate justice. Since, however, equally qualified and incompatible conventions are in force, there is equal justification for contradictory statements purporting to give the essence of justice. To the lover of spectacles, in virtue of his ontology, the πόλις must appear both just and unjust. This rules out the possibility of political knowledge and expertise.

Not only does this conjecture fit the textual evidence, it makes good sense of Plato's reaction to Socrates's complaint against the sophists. The older generation of sophists tended to confuse the power of the spoken word with the force of reason. Their successors went further. They tried to obliterate the distinction. Socrates took steps to set the situation right. He introduced his question-and-answer method of discussion to check the power of rhetoric and make persuasion come through the force of reason. He insisted that knowledge has a structure, that he and his interlocutors must first answer the "What is F?" question before they can answer the other questions that interest them. Plato understood this clash between Socrates and the sophists as a clash between competing conceptions of reality. He understood the sophists, especially the sophists in the younger generation, to advocate a conception of reality according to which claims about justice, beauty, etc., depend on little more than the fancies of the many. Plato believed that this conception of reality undermines the claim of politics to be a "science" (ἐπιστήμη). Without the realm of Forms, Plato thought there could be nothing more than fancies and opinions.

This conjecture also has the virtue of making the Theory of Forms be a response to one of the great unsolved problems of Plato's day. Two groups of intellectuals made this problem salient: the Ionian natural scientists and the sophists. The early Ionian cosmological speculations, with their novel conceptions of objective reality, undermined the unreflective confidence in the traditional methods for

acquiring knowledge. This, in turn, provoked interest in these methods and into how they fit in a general conception of reality. The sophists added fuel to this fire. The older sophists exhibited some confusion over the nature of the justification necessary for knowledge. They tended to confuse the power of the spoken word with the force of reason. The younger sophists changed this confusion into vehement ignorance. They rejected the distinction altogether.

In this historical context, Socrates searched for definitions in his pursuit for knowledge. He thought that having the justification necessary for knowledge is not the same as having the rhetorical tricks and devices that the sophists use to persuade. Socrates thought that knowledge about matters involving justice, beauty, etc., presupposed knowledge of the essences of these properties. He believed that, on such matters, knowledge has a structure, e.g., that if there is empirical knowledge about how a given πόλις holds with respect to justice, there also must be formal knowledge of the essence of justice.

Plato accepted these assumptions in Socrates's method and sought to validate them by fitting them into a conception of reality. He thought that the Forms must exist as substances because otherwise there would be no ground in reality for the definitional truths that are necessary for the possibility of knowledge. He rejected any suggestion that these definitional truths are no more objective than "the many conventions of the many." Plato was convinced that if these truths were subjective in this way, then the younger sophists wrongly turn out to be correct. On this conception of reality, as Plato understood it, political knowledge and expertise are impossible. Plato thought, as he says in the *Timaeus*, that if the Forms are not substances, the distinction between true belief and knowledge would collapse and there would be nothing more than the fancies of individuals.

v. Against Owen

In his seminal and now classic 1957 paper "A Proof in the Περι Ιδεων," G. E. L. Owen maintains that Plato used an "argument from compresence" to show that for certain predicates there are Forms that are substances. His interpretation has stood prominently in the field of Platonic studies,[16] although even some of its supporters have worried that it uncharitably gives Plato beliefs that seem implausible and

eccentric.[17] If Owen is correct, Plato came to believe that the Form the F itself is a sample of F-ness and a standard for F-ness.

Owen maintains, first of all, that Plato believed that the predicates that occur in Socrates's "What is F?" question are "incomplete" and that only for these predicates do Forms exist. Owen writes:

> In *Republic* VII (523a-525a) numbers are classed with such characteristics as *light* and *heavy*, *large* and *small*, on the score that our senses can never discover any of them καθ' αὑτό, in isolation (525d10): in perceptible things they are inseparable from their opposites (p. 108; emphasis in original).
>
> We may say, for convenience, that 'one' as we ordinarily apply it to things is an *incomplete* predicate and that, accordingly as we complete it in this way or that, it will be true or false of the thing to which it is applied. Now the same is true, or Plato talks as if it is true, of all these predicates which in the *Republic* and earlier works supply him with his stock examples of Ideas; and conspicuously so of the logical-mathematical and moral-aesthetic predicates for which the young Socrates unhesitatingly postulates Forms in *Parmenides* 130b-d. In this world what is large or equal, beautiful or good, right or pious, is so in some respect or relation and will always show a contradictory face in some other respect (*Rep.* 479a-b). As large is mixed with small (*Rep.*, 524c), so just and unjust, good and bad... (p. 108; emphasis in original).
>
> Plato's treatment of these incomplete predicates makes no essential use of the idea of physical mutability, often though that idea recurs in characterizing the Forms. Here, it is with the compresence and not the succession of opposites that he is expressly concerned (p. 108).[18]
>
> With these predicates Plato contrasts others which 'finger' is an example. A finger can be seen καθ' αὑτό: sight never reports it to be at the same time not a finger (*Rep.*, 523d). This predicate, then, breeds no contradictions that have to be resolved by specifying πρὸς τί. And the same is evidently

> true of 'man,' and of 'fire' and 'mud': all those predicates for which the young Socrates is unready to admit Forms. That something is a finger is a matter on which sight is competent to pronounce (523b, 524d), and it is characteristic of the sorts of thing to which Socrates refuses Ideas that are just what we see them to be (*Parm.*, 130d) (pp. 108-109).

As examples of the characteristics expressed by "incomplete" predicates, Owen cites lightness and heaviness. He apparently believes that they are "inseparable," or "compressed," in the objects of experience because each is both light and heavy, relative to different standards. Owen maintains that Plato "talks as if" only incomplete predicates occur in Socrates's "What is F?" question and "talks as if" only for these predicates are there Forms that are substances.

Owen is less clear about why Plato concluded that for incomplete predicates there are Forms that are "unambiguous Paradigms," but he seems to claim that Plato came to this conclusion on the basis of the following beliefs: (i) that the truth-conditions for complete predicates such as 'is fire' and 'is a finger' are in terms of standards given by "unambiguous samples" of fire and fingers; (ii) that the truth-conditions for incomplete predicates have the same form as the truth-conditions for complete predicates; and (iii) that the "world which contains unambiguous samples of fire and fingers contains no comparable cases of goodness or similarity." Witness Owen's remarks:

> Zeno's logical puzzles, like the moral antinomies of his successors, were built on such incomplete predicates, and the *Parmenides* of itself would suffice to show that these two classes of problems lie at the root of Plato's earlier theorizing. If we hope to resolve such disagreements by reference to some unexceptional standard, we shall find that the world which contains unambiguous samples of fire and fingers contains no comparable cases of goodness or similarity or equality *καθ' αὐτό*. If we persist, our unambiguous Paradigms must be relocated elsewhere, in a *νοητὸς τόπος* (p. 109).

Plato concludes, out of dogged persistence, according to Owen, that the Forms goodness, largeness, etc., exist as both samples of F-ness and

standards for F-ness. If Owen's interpretation is correct, Plato comes to believe that the Form the F itself exists as a sample of F-ness that is F "in itself" (*καθ' αὐτό*), i.e., that can be known to be F without reference to a standard and is the standard for statements that predicate F-ness of the ordinary sensible objects.

Although he suggests otherwise, if Owen has no evidence from Plato's great middle dialogues, the *Phaedo* and the *Republic*, he is without sufficient support. He maintains that his interpretation could rest on the first part of the *Parmenides*, an assertion which I believe is unwise, since these passages provide no solid evidence for his interpretation, but even if I am wrong, and the young Socrates in the *Parmenides* states and argues for the Theory of Forms in the way that Owen maintains, unless Plato states and argues for the theory in the same way in the middle dialogues, the reader is free to reject Owen's interpretation. Plato could, and perhaps does, make Parmenides force Socrates to fall into *ἀπορία* (= "perplexity" or "lack of *εὐπορία*," i.e., free passage) to illustrate the sort of problems that plague those who, unlike himself in the middle dialogues, state the theory inaccurately.[19] Since, on the traditional ordering of the dialogues, Plato clearly puts the Forms to philosophical work in dialogues that were written after the *Parmenides*, this interpretation seems especially likely.

Owen cites two passages from the *Republic*. He cites Socrates's discussion of the philosopher in book V and his discussion of education in book VII, and the first is the most crucial. For this passage to support Owen's interpretation, the philosopher and the lover of spectacles must play on a field that is leveled by three main assumptions. They must assume that the characteristics expressed by incomplete predicates are compressed with their opposites in the ordinary objects of experience relative to sensible objects that are made to function as standards. Where *x* is a given object of experience, and F is a given characteristic expressed by a complete predicate, both must assume that knowledge that *x* has F is possible only if objects that are "unambiguous" standards exist with respect to F-ness. They must also assume that (the Greek counterpart of) 'is just' is an incomplete predicate. The lover of spectacles, recall, cannot know that a given *πόλις* is just because to him it must appear both just and unjust, and the reason, on Owen's interpretation, is that he must choose sensible

objects as standards and that such objects make for "ambiguous" standards of justice. The philosopher can know that a given πόλις is just, and the reason, on Owen's interpretation, is that his more ample ontology contains some object that is both a non-sensible sample of justice and an "unambiguous" standard for justice.

As I understand Socrates's discussion of the philosopher and the lover of spectacles, it provides no direct support for Owen's interpretation. Socrates does not contrast incomplete predicates with complete predicates. He does not even mention (Greek counterparts of) 'is a finger' and other such predicates that Owen supposes that Plato takes to be complete predicates. Socrates does not maintain that, unlike in the case of complete predicates, the characteristics expressed by (Greek counterparts of) 'is beautiful,' 'is ugly,' etc., are compressed with their opposites in the ordinary objects of experience relative to sensible objects that are made to function as standards. Socrates does not maintain the philosopher is victorious over the lover of spectacles because the philosopher has a non-sensible sample of justice that functions as an "unambiguous Paradigm," whereas the lover of spectacles has only sensible objects and that such objects make for "ambiguous" standards. What he says is that the lover of spectacles cannot know of a given πόλις that it is just, and the reason he gives is that the lover of spectacles refuses to suppose that the Forms are substances and tries to account for the truth-conditions for statements that predicate justice in terms of νόμιμα. The resulting so-called "ambiguity" may or may not have its source in the lovers of spectacles and the various sensible objects that they choose to function as standards, but even if it does, this would not constitute a sufficient reason to accept Owen's interpretation. It would not show that Plato concluded that the Forms are "unambiguous Paradigms."

The passage that Owen cites from book VII of the *Republic* is also without any direct support for his interpretation. In Plato's celebrated parable of the prisoners in the cave, Socrates describes the situation of the soul at birth, a time before it has become a philosopher, so that he can discuss "the effect of education and the lack of it upon our human nature" (514a1-2). The newborn soul, like the lover of spectacles, believes that there are many F things, but not that the Form the F itself is a substance. Because of the "trauma of birth" (*Timaeus* 43a4-44b1), i.e., because the "circuits in the head," as Plato says, "are deranged at

birth" (90d1-3), it no longer remembers what it knew while not in the body, but in "contact" (*Phaedo* 79d6) with the Forms.

This loss of knowledge need only be temporary. Education helps the soul accept and remember what it once knew. It is the "leading around" (*Republic* 518d3-4) of such a soul away from the lusts and desires of body and to the contemplation of the Forms. It is the process by which the incarnated soul becomes a philosopher. If it does not succumb to the body's lusts and desires, but engages in the "upward path" that culminates in having its parts each doing its own job, i.e., in being just and in living the good life, it can change into a philosopher. It then can regain what it lost at birth. It can recollect the Forms that it knew before its incarnation (*Phaedo* 63e8-69e5, *Republic* 508b9-c1, 519a8-b5, 519c10-d1, *Timaeus* 90a2-d8).[20]

To change the orientation of the newly incarnated soul, Socrates recommends a program of physical and intellectual education. To "distinguish" the studies which "lead" in the right direction from those that do not (523a6-7), Socrates distinguishes between those studies in which "the reports of our senses... provoke the intellect" (523a10-b3) from those that do not. To help his interlocutors understand what he means in saying that some studies are likely to make the senses provoke the intellect, Socrates provides examples. He remarks:

> You will understand my meaning better if I put it this way: here, we say, are three fingers, the smallest, the second, and the middle finger (523c4-6). Each of them equally appears to be a finger, and in this respect it makes no difference whether it is seen to be at the end or in the middle, whether it is white or black, thick or thin, and all that sort of thing. In all this the soul of the many is not compelled to ask the intelligence what a finger is, for the sense of sight does not indicate to it that the finger is the opposite of a finger (523c11-d6). <In the case of largeness and smallness, hardness and softness, etc., the situation is different. Consider, first, softness and hardness.> The sense concerned with the hard is of necessity also concerned with the soft, and it declares to the soul that it perceives the same object to be both hard and soft (524a1-4). The soul in turn is puzzled (524a6-7). <The same is true of largeness and smallness.> The sense of sight saw large and small not as

> separate but as commingled (524c3-4). In order to clarify this, intelligence is compelled to see large and small not as commingled but as separate, the opposite way from sight (524c6-8). In some such circumstance as this, we first think to ask what is the large and what is the small (524c10-11).

Socrates says that when the senses report that a given object of experience is both large and small, etc., the soul is "led" to the Forms because it is provoked to ask the "What is F?" question. To transform the soul from a lover of spectacles to a philosopher, he recommends studies in which such sense reports are likely because he believes that these studies are likely to make the soul engage in dialectic.

This is as close as Socrates comes to providing direct support for Owen's interpretation, and as should be evident, his remarks are not very promising. Perhaps they do suggest that Plato is somehow implicitly aware of the distinction between complete and incomplete predicates, but this is too weak to support Owen's interpretation. If Owen is correct, Plato has remarkable beliefs. He believes that Forms are the "unambiguous Paradigms" necessary for the truth-conditions for the statements that predicate the properties expressed by incomplete predicates, and he believes that the sensibles suffice to provide such paradigms for the complete predicates. Owen has not provided nearly enough evidence to attribute these beliefs to Plato.

Not only is Owen's interpretation without textual support, it depends on a dubious assumption. Plato was working with answers to difficult questions about truth and knowledge. In an effort to provide for the possibility of knowledge of propositions about matters involving justice, beauty, and other such properties, he was trying to explain how reality must be so that there are truth-conditions for statements that predicate these properties. If Owen is correct, Plato did not come to believe that only a third realm of Forms can provide these truth-conditions. He came to believe that these Forms exist as star instances of the properties justice, beauty, etc., and that the statements that these objects have these properties are themselves exempt from explanation. This is would be very peculiar. Every explanation must begin with some unexplained propositions, but Owen's claim can seem plausible only against the background of the false assumption that Plato believed that substances are particulars.

Owen smuggles this assumption into the background by putting into the foreground the suggestion that Plato believed that the truth-conditions for statements that predicate the properties expressed by complete predicates, such as 'is a finger, 'is fire,' etc., are given in terms of particular sensible objects that function as unambiguous standards. This suggestion makes Plato appear to begin with the famous Aristotelian assumptions that substances are particulars and that the essences of these objects are somehow given in perceptions. To accommodate the truth-conditions for incomplete predicates, Plato advances in a simpleminded way to the belief that Forms exist as both samples and unambiguous standards. Once, however, that one realizes that Plato did not have the beliefs about complete predicates that Owen claims for him, the background assumption that Plato believed that substances are particulars should fall away.

Without this background assumption, Owen's interpretation is extremely weak. One can no longer quickly and straightforwardly conclude that Plato's belief that the Forms are substances is the bizarre belief that the Forms are special particulars that exist in an "intelligible place" and that are somehow easy for the soul to know when it is not in a body. Only very clear and compelling evidence could warrant attributing this conclusion to Plato, and in book V of the *Republic,* Socrates does nothing to show, or even to hint, that he believes that the Forms exist as "unambiguous Paradigms."

Owen is perhaps correct to suggest, if this is his intention, that Plato believed that the *νόμιμα* put forward by the lover of spectacles are "ambiguous" in way that the Forms are not. Plato may well have believed that no convention was uniquely qualified to be the one that makes F-things be F. Owen is correct, furthermore, if this is his intention, to suggest that Plato argued for his belief that the Forms exist in an *νοητὸς τόπος* by arguing that the lovers of spectacles accept a conception of reality that is inconsistent with the possibility of knowledge. Plato's belief that the Forms are substances, however, is not the simpleminded mistake that Owen maintains. Plato believed that on matters involving justice, beauty, etc., if knowledge is possible, then Forms that are substances somehow provide the truth-conditions for statements that predicate these properties, but there is not enough evidence to conclude that he believed that the Forms provide these truth-conditions by being paradigmatic examples. The text does not

show that Plato had the beliefs about complete and incomplete predicates that Owen claims for him.

vi. Against Vlastos

In his important and influential 1965 and 1966 papers "Degrees of Reality in Plato" and "Metaphysical Paradox," Vlastos offers a different argument for roughly the same conclusion that Owen tries to establish.[21] Vlastos notes that Plato sometimes describes the Forms as somehow more real than the ordinary objects of experience that have these Forms, and he suggests that Plato intends to draw a certain contrast between the Forms and the objects of experience with respect to Socrates's "What is F?" question. Plato intends his readers to conclude, according to Vlastos, that correct answers to Socrates's question have their source in the Forms, not in the objects of experience. The Forms, to use Vlastos's words, are more "cognitively reliable" than the ordinary objects that they characterize.

This might be reasonable, given a reasonable account of "cognitively reliable," but Vlastos provides an account that robs his interpretation of all textual support. Like Owen, he claims that Plato believed that the Forms exist as samples and standards.

Vlastos tries to extract his interpretation from Socrates's discussion of the philosopher and the lover of spectacles. As he reads this passage, Socrates teaches his interlocutors that the attempt to answer the "What is F?" question by concentrating on objects of experience that are F at best yields uncertainty and is likely to yield confusion:

> As is clear in this last passage <from book V of the *Republic*>--the first and also the fullest exposition of degrees of reality--the intended contrast is between the Form, F, and instances of it which are reckoned less "pure" F's than it, because they are not exclusively F, but are F and not-F: their F nature is adulterated by contrary characters, so that we could only get a confused and uncertain idea of what it is to be F, one that would be subject to constant fluctuations as we encountered instances of F that turned out to be different in one or more respects from those on which we based our previous conception of it ([1965], p. 63).

To avoid these problems, Vlastos maintains on Plato's behalf that one should look to the Forms. These objects somehow wear their essences on their sleeves:

> <T>he real F would be the *cognitively* reliable F. Thus, if you want to investigate the nature of gold, coffee, courage, beauty, you must look to the genuine article; the other kind will trick you sooner or later, for along with some F-properties, it has also, perhaps cunningly concealed, some not-F properties, and if you were to take the latter for the former your mistake would be disastrous ([1966], p. 49; emphasis in original).

> The key to it is Plato's conviction that the Forms are the objects of knowledge *par excellence*. They are incomparably the most rewarding to the mind of all the things to which it can turn in its search for truth, for their natures are logically perspicuous, or can be made so with adequate training in dialectic, and all their properties follow from their natures in conjunction with the natures of other similarly luminous and stable objects. Their physical instances are, by contrast, intellectually opaque and shifty. They do not display their intelligible structure on their sensible surface. And when we try to dig it out of them by inference and extrapolation we cannot be sure that the cluster of properties any one of them happens to have here and now it will still have later on or that other things, to all appearance similar, will have this same set of properties now or later. A thing which is F at one time, or in one way, or in one relation, or from one point of view, will be all too often not-F at another time, in another way, *et cetera*. So, generalizing with that reckless audacity characteristic of Greek philosophy at its best as at its worst, Plato infers that this is true of all sensible F's. All of them will be always so infected, hence none of them could ever be a *real* F, and if we take any of them to be such, we will be sure to be deceived. The Form, conversely, will never deceive, for it is by hypothesis invariantly and wholly the special F it is its nature to be. It is, therefore, the real F, the genuine one,

> which can be trusted absolutely in our pursuit of knowledge (p. 50: emphasis in original).[22]

Vlastos maintains that Plato believes that the Form the F itself is such that what makes it be F is somehow open for the pre-natal soul to know. On this interpretation, the pre-natal soul somehow knows that this Form is F, somehow knows that this Form has other properties, and is not "deceived" when it concludes that these properties are what make F-things be F. Once it is in a body, and after it has forgotten this pre-natal knowledge, the soul with "adequate training in dialectic" can recollect what it previously knew.

Vlastos realizes that, on his interpretation, Plato has an unusual belief about justice, beauty, etc., but he insists that the problem is with Plato, not with his interpretation. He maintains that Plato's epistemology forces him to this belief about the Forms. In Vlastos's terminology, Plato holds a so-called "degrees-of-reality doctrine." Vlastos uses this description to bring into focus what he takes to be the distance between Plato's reach and his grasp. Vlastos maintains that a "kinds-of-reality" doctrine "would have served <Plato> much better as an instrument of categorial inquiry" ([1965], p. 75). He would have then had "a better chance to see and state correctly the differences between particulars and universals" (p. 75), but the unfortunate fact of the matter, according to Vlastos, is that Plato's epistemology causes his grasp to fall short of his attempt to reach the kinds-of-reality theory:

> In the interpretation I have offered of Plato's theory, the grounds on which sensible particulars are judged to be less real than their respective Forms coincide very largely... with those categorial features which disqualify them for serving as objects of a certain kind of knowledge: knowledge which, Plato says, has "infallibility," or, in less inflated, more exact, terms for what he means, logical certainty. ... In recognizing only one kind of knowledge--knowledge of objects having these, and only these features--Plato had no choice but to say that only the Forms were completely, or purely, or perfectly "real" in the sense I have been investigating in this paper: cognitively reliable. Thus the degrees-of-reality doctrine is, in this respect, a lucid consequence of Plato's epistemology (p. 73).

Vlastos maintains that the only kind of knowledge that Plato recognizes is the kind that Socrates requests when he asks his "What is F?" question. He maintains that this shortsightedness forces Plato to come to believe that the Forms, unlike the ordinary sensible objects of experience, are samples that the pre-natal soul can use to come to know the properties that are essences. As Vlastos later says, Plato mistakenly "misconstrue < s > universals as a higher grade of particulars" (p. 75). His epistemological beliefs force him to a degrees-of-reality theory, when he clearly wants a kinds-of-reality theory.

Vlastos has not made a very strong case for his interpretation. He slips, first of all, from claiming that Plato believed that definitional knowledge does not have its source in the sensibles to claiming that Plato denied that empirical knowledge is possible. I do not believe that Plato ever denied that empirical knowledge is possible, as this would undermine the right of the philosopher to rule, but even if I am wrong on this point, Vlastos is certainly wrong to suggest that this epistemological proposition alone forced Plato to believe that the Forms exist as samples with special properties. Plato need not reify Forms to provide for the possibility of definitional knowledge, and he is certainly not forced to accept the degrees-of-reality theory. Indeed, even if Plato began with the assumptions that the Forms are metaphysical objects and that definitional knowledge is possible, he certainly still could reject the degrees-of-reality theory. These two assumptions would force him only as far as the kinds-of-reality theory.

Vlastos could close this gap if he could establish that Plato believed that the pre-natal soul acquired definitional knowledge by knowing that a given Form is F, knowing that this Form has certain other properties, and then concluding that these properties are the essence of F-ness. If Plato had these beliefs, one would certainly expect him to show them in the *Phaedo* in his discussion of the Theory of Recollection, but this expectation is disappointed. Plato is clear in the *Phaedo* that the soul first gets knowledge of the Forms before it is born into the body. He is also clear that when the incarnate soul gains insight into its concepts it is actually remembering, or recollecting, knowledge that it first acquired when it existed outside the body and in the realm of the Forms, but Plato is notoriously taciturn about how the pre-natal soul first acquires knowledge of the Forms. He is convinced that it

happens, but he does not explain how it happens. This fact casts serious doubt on Vlastos's interpretation.

Vlastos himself maintains that book V of the *Republic* contains Plato's "fullest exposition of degrees of reality," but if he is correct, then he has no hope of closing the gap between the text and his interpretation. Vlastos does not attribute to Plato a proposition that any reasonable person could be expected to believe. He gives him a belief that few, if any, have ever had. To show that Plato had this belief, Vlastos requires solid evidence. No such evidence is in the discussion of the philosopher and the lover of spectacles. Although he is wrong to assert that Plato only recognized one kind of knowledge, he is correct that the passage shows that Plato believes that if a given person limits himself to an ontology in which essences are not starting-points, he cannot know correct answers to Socrates's "What is F?" question. This, however, obviously falls far short of showing that Plato believed that the Forms exist "as a higher grade of particulars." Indeed, it falls short even if one grants that Plato believed that correct answers to the "What is F?" question do not have their source in the ordinary objects of experience. Vlastos is correct to emphasize, if he intends to make this point, that Plato believed that the Forms are somehow "cognitively reliable" in a way that the conventions of the lovers of spectacles are not. He is also correct, if this is his intention, to maintain that Plato argues that the Forms are substances by arguing against alternative conceptions of reality in which essences are not starting-points, but Vlastos is wrong to assert that Plato believed that the Forms exist as samples and standards. This can seem plausible only if a false assumption stands in the background. Vlastos seems to assume that Plato supposed that whatever exists as a substance exists as a particular, and he seems to use this assumption to bridge the gap between the evidence in the text and his conclusion that Plato makes the Forms exist "as a higher grade of particulars." Aristotle believed that substances are particulars, but one cannot simply read this belief back into Plato. Vlastos needs evidence, and none is forthcoming from Socrates's discussion of the philosopher and the lover of spectacles in book V of the *Republic*.

vii. Against Irwin

Terry Irwin argues for an interpretation that does not charge Plato with the belief that the Forms exist "as a higher grade of particulars," but his interpretation is hardly generous. Witness his remarks:

> In the middle dialogues Plato does not mention "separation." He insists on the non-identity of the Form of F and the many Fs (*Phd.* 74a9-12, b4-7; *R.* 476c9-d3; *Symp.* 211a1-b5). This might imply nothing more than non-reducibility. ... <This> is a legitimate conclusion from Plato's arguments. However, "separation" for Aristotle implies a stronger claim about independent existence... Plato does not clearly formulate <this claim> in the middle dialogues; but he suggests it, and Aristotle's view that he holds it is normally, and rightly, accepted ([1977b], p. 154).
>
> The confusion might be partly explained by indiscriminate talk of "sensibles" or "what the senses reveal," meaning sometimes "sensible properties" and sometimes "sensible objects".... His attitude to separation confirms our claim that the arguments for <non-reducibility> are his real arguments for separation; he offers no further argument for <independent existence>... (p. 155).
>
> Forms <cannot> be sensible properties; justice cannot, for instance, be the same property as the property of returning what has been borrowed, since the latter property makes actions both just and unjust (by making some just and others unjust). But some further arguments are needed to support the conclusion (attributed to Plato by Aristotle) that Forms are separated, and therefore would exist even if no sensible objects existed. Though Plato may indeed believe in this independent existence of Forms, he does not argue for it, and he does not appeal to it in his contrasts between Forms and sensible things ([1989], p. 93).

According to Irwin's interpretation, Plato's conception of reality is born in the sin of a simpleminded mistake. Irwin maintains that Plato made this mistake because he did not clearly appreciate the difference

between two very different propositions: the ontologically menacing proposition that justice, beauty, etc., exist separately from the ordinary sensible objects of experience and the ontologically innocent proposition these properties cannot be adequately defined in terms of sensible properties. According to Irwin's interpretation, Plato argued that the Forms cannot be adequately defined in terms of sensible properties and concluded that the Forms exist separately and as substances.

To establish his interpretation of the development of Plato's thought, Irwin tries to show that in texts where Plato seems to be arguing for the proposition that "the universals <are> separate" (*Metaphysics* 1078b30-32), to use Aristotle's words, he is actually arguing for nothing stronger than the ontologically innocent proposition that justice, beauty, etc., are not definable in terms of sensible properties. Irwin presses this interpretation for both Socrates's autobiography in the *Phaedo* and Socrates's discussion of the philosopher and the lover of spectacles in book V of the *Republic*. Irwin writes:

> <In book V of the *Republic*, Plato argues> that concentration on sensible properties will yield no knowledge of justice, beauty and so on. Plato's opponents are "lovers of sights and sounds," who deny the existence of a single form, the beautiful, besides the many sensible properties, each of which is alleged to be "the beautiful in" various things, houses, temples, institutions. To find the beautiful in something, what makes something beautiful, the sight-lovers must find a property which is always beautiful, never not-beautiful (cf. *Phd.* 102d5-8). But any of the sensible properties alleged to be the "many beautifuls" will also be not-beautiful (478e6-479a10); the bright color (cf. *Phd.* 100d1) alleged to be the beautiful in temples will be not-beautiful in some temples; debt-paying, alleged to be justice in some actions, will also sometimes be unjust (cf. *Rep.* 331c-d, 538d6-e3); the pleasures which are alleged to be the good will sometimes be bad--some will be good and others bad (505c10-11). These properties allow no knowledge of the beautiful, the just or the good; for knowledge, we must describe a separated Form irreducible to sensible properties ([1977a], p. 9).

> *Republic* V explicitly insists, as the *Phaedo* implied, that reference to separated Forms is necessary for knowledge...; and it shows, as the *Phaedo* also implied, that the separated Forms are required because of faults in the senses and observation. Plato argues that those who love sights and sounds, and recognize "many beautifuls" but no single Form, The Beautiful, cannot escape the *Phaedo*'s objections to defective explanations ([1977b], p. 151). The sight-lover must recognize a single property..., apart from observable properties (p. 152).

According to Irwin, Socrates's complaint against the explanations according to the lovers of spectacles is that they wrongly believe that justice, beauty, etc., are definable in terms of sensible properties.[23] Irwin maintains that this same point is earlier "implied" in the autobiography in the *Phaedo*. He maintains that this point is the implied lesson of Socrates's discussion of the "defective explanations" of the natural scientists. These explanations are defective, on Irwin's interpretation, because they are attempts to define justice, etc., in terms of sensible properties. Irwin writes:

> The deficiency of sensible properties supports Plato's rejection of mistaken efforts at explanation. If someone tries to explain why things are larger by reference to some observable property (e.g., "by a head," *Phd.* 96d7), he will fail; for many things are larger than other things without being larger by a head, and things may be smaller, as well as larger, by a head. Observable operations (e.g., "add two") equally fail to explain what makes one set more numerous than another (96e1). These accounts are meant to be ridiculous--no one would try to explain largeness and numerousness that way. But Plato uses them to suggest that some apparently less ridiculous explanations are no more defensible. He rejects accounts of the beautiful referring to bright colors, shapes, "or anything else of this kind" (100c9) ([1977a], p. 8).

> The rejected accounts mention some observable features (e.g. "by a head") of what makes x larger than y (*Phd.* 96d7-e1), or some observable operation (e.g. "add two") to

> make x more numerous than y (96e1-3). An observable feature O of x may show us that x is F, but O will not provide the right account of x's being F, for the correct account should apply always and only to F's, whereas (a) O might be present in non-F's (100e8-101b2), and (b) O might be absent in F's (97a5-b3) ([1977b], p. 151).

Irwin maintains that Socrates cites the "intentionally ridiculous" attempts to appeal to sensible properties to explain what makes large things large, numerous things numerous, etc., in an effort to make the general point that his "What is F?" question is about properties that are not identical with sensible properties. If Irwin's interpretation is correct, Socrates is not making an ontological claim at all. He is not arguing that the Forms are substances. Socrates is simply trying to help his interlocutors understand what his predecessors apparently failed to understand: namely, that beauty, justice, and the other properties he uses his "What is F? question to ask about, are not definable in terms of sensible properties.

As I read the autobiography, Plato is not just making the point that Irwin claims for him. When Socrates says "farewell" to "having a blooming color," etc., as αἰτίαι for why beautiful things are beautiful (100c9-d3), he does not describe the rejected answers as attempts to define beauty in terms of sensible properties. He describes them as "wise" answers that "trouble" him. No doubt part of what troubled Plato about at least some of these attempts at definition is that they are open to counterexample. Perhaps Plato also believed that some of these counterexamples are possible because these "wise" answers are attempts to define beauty in terms of sensible properties, when in fact beauty is identical to no such property, but after dismissing "having a blooming color," etc., what his character actually goes on to say is that nothing other than the Form "itself according to itself" (αὐτὸ καθ' αὐτό) is that "by which" (instrumental dative) beautiful things are beautiful. This suggests that what disturbed Plato about the "wise" answers of the natural scientists has nothing to do with whether justice, beauty, etc., are definable in terms of sensible properties.

With respect to matters involving justice, beauty, etc., Plato rejected these "wise" answers because he believed that they are born in a method of inquiry that is part of a conception of reality that is

inconsistent with the possibility of such knowledge. Plato rejected the natural scientists's method of inquiry in favor of the leading assumptions in the method that Socrates pursues. In the definitional dialogues, Socrates insists that in the search for knowledge he and his interlocutors must first answer the "What is F? question before they can answer the other questions that interest them. Furthermore, in these same dialogues, Socrates refuses to consider a definitional answer to his "What is F?" question until he has first secured the preliminary agreement that the Form the F itself is that "by which" F-things are F. In his autobiography, Socrates insists on the priority of Forms that exist "themselves according to themselves," and he rejects explanations according to the method of the natural scientists as outright non-starters. Perhaps this does not amount to a completely explicit argument that the Forms are substances, but neither is it just an innocent way of asserting that every attempted analysis of justice, etc., in terms of sensible properties is open to counterexample.

Book V of the *Republic* provides more evidence against Irwin's interpretation. Plato again argues for the Forms by arguing that alternative accounts suffer from defects that seem to have nothing to do with sensible properties. The lover of spectacles fails to meet the Socratic challenge because he insists on explanations of the truth-conditions for statements that predicate beauty in terms of "the many conventions (*νόμιμα*) of the many concerning the beautiful" (479d3-4), not because he tries to define beauty in terms of sensible properties. In the passage at 493aff., e.g., where the lover of spectacles appears in the guise of the sophist, Plato complains that "what <the mob> enjoys he calls good, what angers it he calls bad, and he can give no other account of them" (493c2-4). These accounts are not definitions in terms of sensible properties.

Contrary to Irwin's interpretation, Plato is not trying to show that justice is not definable in terms of sensible properties. His lesson is much more striking and philosophically interesting. At issue is the proper explanation for why a given *πόλις* with certain properties counts as just. The definition he puts forward earlier in book IV shows that Plato believed that justice is a non-sensible property, but this fact is not relevant to his discussion of the philosopher and the lover of spectacles in book V. In book V, Socrates teaches a lesson about the source of the truth-conditions for statements that predicate justice.

Plato believed that explanations in terms of "many conventions of the many," unlike explanations in terms of the definitional content of the one Form that exists "itself according to itself" (αὐτὸ καθ' αὑτό), are part of a conception of reality that has the very unpalatable skeptical result that political knowledge and expertise is impossible. This is why Plato concluded that the Forms are substances.

Another problem for Irwin's interpretation is his suggestion that Plato conflates sensible objects and sensible properties. This suggestion is implausible. Plato might not have appreciated the difference, but this is not what one would expect from someone who never tired of making his character explain that the "What is F?" question is not a question about ordinary particulars that are F. Irwin must provide evidence for his suggestion, and the only evidence that he musters presupposes that his interpretation is true. Irwin is apparently convinced that Plato argues that justice, etc., are not definable in terms of sensible properties and invalidly concludes that the Forms are substances. To explain this development, Irwin hypothesizes that Plato conflates sensible objects and sensible properties. This is a move of last resort, and I do not believe that it is warranted.

The philosophical import of the *Phaedo* and *Republic* is certainly not straightforward, but I see no good reason to conclude that Plato is confused in the way that Irwin maintains. Plato believed that the Forms are substances, not because he fell into a confusion over sensible objects and sensible properties, but because he believed that no other conception of reality validates the leading assumptions in the Socratic method for acquiring knowledge about matters involving beauty, justice, and other such properties. Plato believed that conceptions of reality in which essences are not starting-points are inconsistent with the possibility of such knowledge. Plato indicates this belief in the two great dialogues from the middle period. He indicates it in the autobiography in the *Phaedo* in his discussion of Socrates's encounter with the natural scientists's method of inquiry, and he indicates it in book V of the *Republic* in his discussion of the philosopher and the lover of spectacles.[24]

4

HERACLITEAN FLUX

i. Introductory remarks

Aristotle tries to explain the genesis of the Theory of Forms in terms of certain of Plato's beliefs about definition, knowledge, and the Heraclitean thesis that the sensibles "flow" (*Metaphysics* 987a32-b7, 1078b9-1079a4, and 1086a31-b11). His explanation is incomplete, in that it make no mention of the sophists, but it does serve to more sharply focus Plato's argument against the natural scientists. His remarks suggest that Plato believed that, since the sensibles are flowing, no ontology that takes them as starting-points can provide for the existence of essences. According to Aristotle, this is why Plato concluded that the Forms exist separately and as substances.

ii. The Aristotelian explanation

The relevant question to answer about Plato and his belief in Forms, when it is expressed in Aristotle's terminology,[1] is why he made the universals exist separately and thereby made them exist as substances. Aristotle states part of his answer in the following passages:

> Socrates was busying himself with ethical matters, neglecting the world of nature as a whole. He was seeking the universal in these ethical matters, and he fixed thought for the first time on definitions. Plato accepted the importance of definition, but because he thought that the common definition could not be about any sensibles, as they were always changing, he thought this happens on account of other things, and not the sensibles. Things of this other sort he called ideas (987b1-8).

> <Plato and the Platonists> did not make the substances the same as the sensibles. They thought that in the sensibles the individuals were flowing and that none of them remained, but that the universal exists beside (παρά) these things and is something different from them. This, as has already been said, was set going by Socrates through his definitions, but he did not separate them from the particulars, and he was right not to make a separation. This is clear from the results. Without universals, to take knowledge is impossible. Separation is responsible for the difficulties arising about the Ideas (1086a36-b8).

Aristotle reports that Socrates "was seeking the universal" in his search for knowledge. He reports that Plato accepted this practice, but because he further supposed that the sensibles are somehow "flowing," he concluded that the universals are separate.

Aristotle does not say why Socrates and Plato believed that definition is important in the search for knowledge, but Plato's readers should have no trouble supplying the answer. In the early definitional dialogues, Socrates proceeds in a way that suggests that, with respect to beauty, justice, etc., he believes that the inquirer must know the essence of F-ness before he can know the answers to the other questions involving F-ness that interest him. Plato may not accept a strong form of the priority of definition, but he certainly believes that if no one can answer Socrates's "What is F?" question, and knowledge of the essence of F-ness is impossible, then knowledge about matters involving F-ness is equally impossible.

Although his remarks are obscure in many ways, Aristotle is clearly correct that the road to Platonism begins with "Socrates through his <search for> definitions." Socrates turned away from explanations according to the method of the natural scientists, and he resisted the sophists's tendency to confuse the power of the spoken word with the force of reason. Socrates suggested that definitional knowledge is part of the justification that is necessary for knowledge. He also suggested that the Forms insure that there are definitional truths to be possible objects of knowledge. In the early dialogues, in his search for knowledge, the character insists on the (A1) response to the preliminary (Q1) question. In the *Phaedo*, and then again in the

Republic, Plato defends this insistence on the priority of Form. He decides against the ontologies that he associates with the natural scientists and the lover of spectacles, and he concludes that only if the essence of F-ness exists as a substance and a starting-point can there be knowledge with respect to matters involving F-ness.

Many Platonic scholars suppose that Aristotle is correct to maintain that some sort of flow doctrine plays a central and essential role in the development of Plato's thought about Forms. Norman Gulley offers an especially strong statement of this position:

> In the *Metaphysics* Aristotle states that an important factor in the development of Plato's theory of Forms was an acquaintance, through Cratylus, with the Heraclitean doctrine of universal 'flux,' which led Plato to the conviction that, since all sensible things are always in flux, they cannot be the objects of knowledge, and, consequently, that there must be other things to serve as objects of knowledge which are not sensible and not subject to changes (987a32-4; 1078b12-16). There are no adequate grounds for questioning the general truth of Aristotle's statement ([1962], p. 26).

Gulley confidently proclaims that on the Theory of Forms, there are "no adequate grounds for questioning the general truth of" Aristotle's account.[2] Whether his confidence is warranted depends on what propositions Aristotle's remarks express.

Although perhaps they are not equally likely, Aristotle's remarks admit of more than one interpretation. On one interpretation, Aristotle claims that Plato concluded that the universals are separate because he believed that the sensibles are flowing, believed that there are referents of the subject terms in the propositions that constitute knowledge, but believed that flowing things cannot be among them. Aristotle's remarks can, I think, seem to contain these suggestions. Witness, e.g., his thoughts in the following passages from the *Metaphysics*:

> In his youth Plato became familiar with Cratylus and the Heraclitean doctrines, that all sensibles are always flowing and that knowledge about them is not possible, and these views even in his later years he accepted (987a32-b1).

> The belief about Forms came about to those who spoke about them because they were persuaded by the Heraclitean arguments that all sensibles are always flowing. They held that if knowledge and thought are to be about anything, there must be remaining some different natures, besides (παρά) the sensibles, for there is no knowledge about flowing things (1078b12-17).

In these passages, Aristotle may seem to make Plato argue from

(1) knowledge has objects
(2) the sensibles are flowing
and (3) if (2) is true, the sensibles are not objects of knowledge

to the conclusion that

(4) the universals exist separately.

On this interpretation, Aristotle maintains that Plato was a skeptic concerning knowledge about the ordinary objects of experience. He concluded the universals exist separately and as substances because otherwise there would be nothing to know.[3]

Depending on the analysis of "flowing," this interpretation divides into two more specific interpretations. Premise (2) could express the weak claim that the ordinary objects are changeable, or it could express the very strong and paradoxical claim that they are always changing in every way. These readings shift the burden of proof between premises (2) and (3). The weak reading puts the burden on premise (3). The strong reading puts it on premise (2).

In either case, there is a good reason to suppose that Aristotle is dead wrong about Plato. The reason is in the central books of the *Republic*. These books show that Plato did not turn his back on the world of the ordinary objects of experience. On the contrary, he argued that only the philosopher, not his competitor, the lover of spectacles, is a candidate to rule because only the philosopher has an ontology that is part of a conception of reality according to which there can be political knowledge and expertise.[4] No premise about change

figures in this argument. Plato's complaint is that, instead of accepting a conception of reality according to which essences exist as substances, "themselves according to themselves," the lover of spectacles recognizes only the "many conventions of the many."

Indeed, despite the passages from the *Metaphysics*, the context in which Aristotle places the Theory of Forms suggests that he did not believe that Plato was a skeptic. He characterizes the theory as one among many attempts to put forward objects as "causes," the knowledge of which constitutes the "wisdom" (σοφία) that the philosopher seeks (981b28). Aristotle says that Plato supposed that "the Forms are causes of the other things" (987b18-10) and that they "provide the essences of each of the other things" (988b4-5). In the light of these remarks, Aristotle must at least admit that Plato should believe that the Forms provide for the possibility of knowledge about the ordinary sensible objects. Aristotle himself claims that "causes are spoken of in four ways, in one of these ways of speaking we say that the cause is the substance and the essence" (983a26-27) and that "it is knowledge of each thing when we know the essence of that thing" (1031b6-7). Aristotle, moreover, argues that the Forms can not be substances by arguing that such objects would contribute nothing to the "knowledge" of the sensibles "because they are not the substances of these things because they are not in them" (991a12-13, 1079b15-17). These remarks strongly suggests that Aristotle admits that Plato not only should, but actually did believe that the Forms provide for the possibility of knowledge with respect to the sensibles.

If this is correct, and it seems to be, Aristotle is not uncharitable. He allows that Plato intended for Forms to provide for the possibility of such knowledge. He does not complain that the Theory of Forms does not solve some problem that Plato does not intend it to solve. He does not complain that Plato thought that he could make the Forms be causes and essences but that he need not enlist their help to account for the possibility of knowledge with respect to the sensibles.

Aristotle's complaint is not an uncharitable quibble. It is that Plato failed to understand that if the Forms are substances, and exist separately from the sensibles, then they cannot help provide for the possibility of knowledge about these objects. Aristotle explains that Plato failed to understand that nothing in another realm can help provide for the possibility of knowledge about objects that are in the

realm of ordinary experience. "Separation," he says, "is responsible for the difficulties arising about the Ideas" (1086b8).[5]

Another problem with these interpretations is that, in each case, they force Plato to accept a very implausible premise. On the weak understanding of "flowing," premise (3) can only seem to result from a very simpleminded error. Hardy puts the point as follows:

> It looks at the outset as if liability to change could not of itself suffice to preclude knowability, and as if a very simple fallacy might give rise to the suggestion that it could. It might be said that, if x is something changeable, the proposition 'x is characterized by y' cannot express knowledge since it may not be true to-morrow that 'x is characterized by y.' But knowledge can never become false. To this it seems sufficient to answer that, in the case supposed, nothing has 'become false'; since it will not anyhow be false to-morrow that x is characterized by y to-day ([1936], p. 12).

Plato is not immune to philosophical error, but given his brilliance, very clear evidence is necessary before one can conclude that he is guilty of such a simple mistake.

A similar point holds for the strong reading of "flowing." Although Plato could in principle believe that the ordinary objects are in radical flux, this proposition has immediate consequences that are obviously absurd, and these consequences are in clear conflict with his most distinctive philosophical claims. If the ordinary objects of experience are in radical flux, whether or not the Form the just itself exists, and whether or not the philosophers or the lovers of spectacles are the politicians in power, the πόλις is nevertheless always both just and not just. There thus seems to be no point to arguing, as Plato does at length in the *Republic*, that only the philosopher is fit to rule because only the philosopher agrees that the Form the just itself exists as a substance. Indeed, argument itself would be impossible. Whether or not the Forms exist, if the ordinary objects are in radical flux, every token sentence both expresses a given proposition and does not express that proposition. Plato could have missed these consequences, but only clear and compelling evidence could show that he was so shortsighted.[6]

iii. Careless assimilation

If Plato does not believe that the sensibles are in radical flux, and Aristotle claims otherwise, then Aristotle is mistaken. One way to try to explain his mistake is to show that, in his explanation of the genesis of the Theory of Forms, Aristotle "carelessly assimilated" various thoughts from different parts of the Platonic corpus. In her commentary on books M and N of the *Metaphysics*, Annas suggests that Aristotle is guilty of such an assimilation:

> The nearest Plato comes to accepting something like the flux argument is at *Timaeus* 51-2, where he does accept that the physical world is in flux and that therefore objects of knowledge cannot be found in it ([1976], p. 153).
>
> Aristotle is then at best giving what he takes to be the leading idea behind Plato's theory, rather than pointing to what Plato himself argues. It is possible that he is thinking mainly of the *Timaeus* argument (the *Timaeus* is the dialogue he most frequently cites) and that this leads him to ignore the fact that the argument most prominent in the middle dialogues is in fact quite different from the flux argument, though it could be quite easy to confuse them. The line of thought stressed at *Phaedo* 74-5 and *Republic* 479-480, and referred to at *Parmenides* 128-9, depends on features of predicates of which 'equal' and 'just' are examples, and whose striking aspect is that one can, in the case of any particular to which it is applied, also apply the contrary with equal justification (what is just from one point of view is unjust from another, and so on). By contrast, the Form of Justice is that to which only 'just,' and never 'unjust,' can be applied. Forms must be distinct from particulars because only to the latter, never to the former, can one of these predicates be applied together with its opposites. Aristotle may have carelessly assimilated this 'argument from opposites' to the flux argument, which involves the succession of opposites and thus provides a support for the other argument, but is clearly different from it and not implied by it. Unless Aristotle has made this assimilation it is hard to see why he ignores a line of thought which is

> much more prominent as serious backing for Forms in the middle dialogues than considerations of flux and change (pp. 153-154).

Annas follows Owen in the analysis of the argument in the *Republic* against the lover of spectacles.[7] She suggests that because Aristotle was very familiar with the *Timaeus*, and because in this dialogue Plato comes closest to giving the "argument from flux," Aristotle "carelessly assimilated" the two arguments.

Annas is wrong to follow Owen, and she is wrong to suggest that Plato anywhere accepts the extreme Heraclitean doctrine that the sensibles are in radical flux, but perhaps "assimilation" is at least a possible explanation of how someone familiar with the Platonic corpus,[8] could arrive at the Aristotelian explanation of the development of Plato's thought. Perhaps the explanation results from assimilating the argument against the lovers of spectacles and the argument in the *Cratylus* and the *Theaetetus* against the Heracliteans. I do not believe that Aristotle is guilty of this assimilation, but as I shall show, it is an easy mistake to make.

iv. Heraclitus and Protagoras

Although he may allude to it elsewhere, Plato's only explicit discussions of the flow doctrine occur in the *Cratylus* and the *Theaetetus*. In these dialogues, Plato seems to put the flow doctrine together with the Protagorean measure doctrine to constitute a conception of reality that he takes to be an unsuccessful competitor to the Theory of Forms. In this context, the flow doctrine appears to be the proposition that everything is subject to change, including the essences of justice, beauty, and the other properties that Socrates uses his "What is F?" question to ask about. Plato clearly rejects this proposition about the essences of justice, beauty, etc., but his arguments seem directed against a different and much more paradoxical proposition. His arguments seem directed against the proposition that everything is always changing in a every way.

Plato rightly argues that this proposition is absurd, and he never says, or even hints, that the absurdity would be eliminated if the universal quantifier in this proposition were restricted to range over the

ordinary objects of experience. In these two dialogues, nor, for that matter, in any other place in the corpus, does Plato show himself to agree with Cratylus and the extreme Heracliteans that the ordinary objects of experience are always changing in every way.

The *Cratylus* begins with Socrates interrupting a dispute over what is very vaguely described as the "correctness of words" (383a4-5). Hermogenes asks Socrates to moderate a dispute over what determines whether a given sequence of sounds or letters constitutes a word (383a4-b2). Hermogenes believes that words are simply a "portion of the human voice that men agree to use" (a6-7), but Cratylus believes that whether a given sequence of sounds or letters is a word is somehow "determined by nature" (a7-b1).

After he enters the discussion, Socrates quietly changes the topic of conversation to a more interesting subject. Instead of what determines whether a given sequence of sounds or letters constitutes a word, he asks Hermogenes what determines whether a given utterance or sentence expresses a truth (385a6-10). Hermogenes does not notice the change in topic, and instead of helping him directly, Socrates decides to let him fumble through a question-and-answer session. He gets him to dismiss the Protagorean doctrine that "man is the measure of all things" as an answer to this question (385e4-386d2), and he then again turns the conversation to a new question.

Socrates now wants to know who are the experts in the uses of words, and the answer he puts in Hermogenes's mouth is reminiscent of Socrates's own claim in the *Republic* that only the philosopher is fit to rule over the πόλις. Hermogenes agrees that words are "instrument<s> for teaching and distinguishing beings (οὐσίαι)" (388b13-c1) and that the "legislator" (νομοθέτος, 388e1) is the artisan who introduces the acceptable uses of words to the ordinary language users in the general public. He agrees that the legislator is no common craftsman, but is very highly skilled, and that the "dialectician" (διάλεκτος, 390c11), the person who knows how to ask and to answer questions, is the only person with the requisite knowledge and expertise to direct the legislator in his work (388b7-390d6).

In his discussion of the Protagorean measure doctrine, although he does not explicitly mention the Heraclitean flow doctrine, Socrates seems to oppose these two doctrines to two claims that, in other

dialogues, he makes about the Forms. In the *Phaedo* and the *Republic*, Socrates accepts a realist theory of the essences of beauty, justice, and the other properties that he uses his "What is F?" question to ask about. In the *Cratylus*, Socrates appears to have this theory in mind. He twice stands behind the remark that the "being (*οὐσία*) of things" is both "firm" and "by nature." The passages read:

> Does it appear to you that things hold this way, that the being of them is private to each, as Protagoras said, saying that man is the measure of all things--that as things appear to me, such they are for me, and as they appear to you, such they are for you--or does it seem to you that things have a certain firmness of being of their own?
>
> There have been times, Socrates, when I have been driven in my perplexity to take refuge in what Protagoras says; however, I do not believe that things hold this way (385e4-386a7).

> <If, Hermogenes, you reject what Protagoras says, then> it is clear, indeed, that the things themselves have a firm being of their own, not relative to us, nor dragged up and down according to our appearance, but according to themselves relative to their own being as they are by nature.
>
> That is how it seems to me, Socrates (386d9-e5).

In these passages, Socrates presents Hermogenes with a disjunction. On one side, which he clearly believes is the correct side, there is

(i) "being by nature" and "firm being."

These are features that characterize the Forms. On the other side, which Socrates clearly believes is the incorrect side, there is

(ii) "being relative to __" (or: "conventional being") and "fluctuating being."

Socrates does not explicitly talk in terms of "fluctuating being," but he no doubt takes this to correspond to "firm being."

This contrast appears in other places in the corpus. In the *Republic*, e.g., in his explanation of why only philosophers are fit to rule, Socrates maintains that the just itself and the other Forms exist by nature:

> <As the philosopher-rulers> work, they would keep looking back and forth to justice, beauty, moderation, and all such things as by nature exist, and they would compose human life with reference to these... (501b1-4).

In the first part of the *Theaetetus*, where Socrates considers whether "knowledge is perception" (151e2-3), the measure doctrine and the flow doctrine appear as a pair and presumably in opposition to the Theory of Forms. They appear together, e.g., in the speech that Socrates makes in Protagoras's defense:

> Whatever in any city is regarded just and fine is just and fine, in that city and for so long as that convention maintains itself, but the wise man replaces each pernicious convention by a wholesome one, making this both be and seem just (167c4-7).

> If you take my advice, you will sit down with us without ill will or hostility, in a kindly spirit. You will genuinely try to find out what our meaning is when we maintain that all things are in motion and that for each person and each city, things are what they seem to them to be (168b2-6).[9]

They also appear together in Socrates's description of certain of the beliefs that were common in his day:

> <Some> men are ready to insist that no one of these things, just and unjust, religious and irreligious, etc., has by nature any being of its own. In respect to these, they say, the opinion in common becomes true at the moment when it is made and so long as the opinion stands, and even those who are not prepared to go all the way with Protagoras take some such view of wisdom on these matters (172b2-7).

> We were speaking of the people who assert a being that is in motion, and who hold that for every individual things are always whatever they seem to him to be; and we said that they were prepared to stand upon their principle in almost every case--not least in questions of what is just and right. Here they are perfectly ready to maintain that whatever any community decides to be just and right, and establishes as such, actually is what is just and right for that community and for as long as it remains so established (177c6-d2).[10]

Socrates makes Heraclitus and Protagoras stand together, and he makes them fly banners that oppose the two most distinctive features that Plato gives to the Forms. Heraclitus declares that "being is in motion," and Plato argues that "being is firm." Protagoras declares that "being is relative to __," and Plato argues that "being is by nature."

Plato does not explicitly introduce the flow doctrine until the latter half of the first section of the dialogue. This section begins with Socrates suggesting to Hermogenes that because he rejects the measure doctrine he must admit that Cratylus is the winner in their dispute over the "correctness of words" (390d7-e4). Hermogenes is rightly nonplused, but does not see how to make his case, so he asks Socrates to provide an example (390e5-391a3). Socrates should give him a lesson in dialectic, but he apparently judges that Hermogenes is not ready for philosophy. He suggests instead that Hermogenes, like his brother before him, ought to get his education from the sophists.[11] Hermogenes balks at this suggestion, since he has already rejected Protagoras's measure doctrine, and Socrates agrees to help him learn from Homer and the poets according to the method of "etymology" (ἐτυμολογία = ἔτυμος ("true") + λόγος ("account")).

In pursuing this method of inquiry, which seems to amount to extracting meaning from the letters that language users use to spell their words, Socrates first mentions Heraclitus and his doctrine in connection with the Doric word for "being":

> Those who said ὠσία [= the Doric form of the Attic word οὐσία ("being")] must have inclined to the opinion of Heraclitus, that all things are made to flow and none to remain, for to them the cause and ruler of all things is the

> hurrier (*το ωθοῦν*), and was therefore rightly called *ὠσία* (401d4-7).[12]

After several more such accounts, Socrates suggests that he now sees that the flow doctrine is the assumption that guided these ancients and also guides the contemporary wise men:

> By the dog, I have not a bad notion which came into my head only this moment. I believe that the ancient givers of words are altogether just as the many contemporary men of wisdom, who, in their search for how the things hold, get dizzy by being turned around, and then to them it appears that the things are whirling around and always changing. They do not cite their internal condition as the cause of these beliefs, but claim that the things themselves are thusly by nature, that none of them is steadfast nor firm, that they flow... (411b3-c4).

Socrates says that the ancient givers of words and contemporary men of wisdom in their search for "how the things hold," got turned around and became dizzy, and because to them the world seemed to be whirling around, they declared that nothing has a "firmness of being," but that everything "flows." Socrates does not say how these inquirers are "turned around," but the answer is clear from the *Phaedo* and the *Republic*. They are not looking to the Forms.

In the second section of the dialogue, as one might expect, Socrates marks Cratylus as one of these contemporary so-called "men of wisdom." Cratylus is not, at least not initially, as agreeable as Hermogenes. He rejects Socrates's claim that properly using words is an "art" in which only a few are skilled, and he insists that all uses are equally acceptable (428e6-429b11). He does not offer the Heraclitean flow doctrine as justification for his views on the correctness of words, but Plato seems to intend the reader to draw this conclusion.

This intent seems to show itself at the end of the dialogue. In an apparent effort to refute the flow doctrine to preserve his thesis about the uses of words, Socrates repeats his claim about the ancient givers of words and introduces the Forms:

> If they gave words having in mind the thought that the things were all always changing and flowing--at least I think this is what they thought--and, if as it happens, this is not how things are, they themselves are both such as to have fallen into a kind of whirlpool and to drag us down after them. Consider, Cratylus, that which I often dream. Shall we say that there is a beautiful itself, a good itself, and one each of the beings thusly?
>
> It seems so to me, Socrates.
>
> Let us consider this itself, not if some face is beautiful, or something of this sort, and it seems that they all flow, but let us ask whether the beautiful itself is always such as it is?
>
> Necessarily (439c1-d7).

Socrates gets Cratylus to agree that the beautiful itself is not flowing, but "is always such as it is." He does this, presumably, as a prelude to explaining why Cratylus and others who accept that everything is always flowing have "fallen into a kind of whirlpool."

The reader would expect Socrates to explain that because the Heracliteans reject the Platonic conception of reality and assert that everything is subject to change, including the "beings" of justice, beauty, etc., they accept a conception of reality that is inconsistent with the possibility of knowledge. This, however, is not quite what happens. Socrates does explain that the Heracliteans accept a conception of reality that is inconsistent with the possibility of knowledge, but in his argument, he makes them accept the paradoxical proposition that everything is always changing in every way.

This strategy informs Socrates's subsequent remarks. He first argues that if a given thing is in such flux, then, among other things, no one can know how it holds. 439d7 continues as follows:

> Can one rightly call it, if it is always slipping away, first that this is, then that such as, or must not at the same time that we are speaking it straightaway becomes other and slips away and no longer thusly holds?
>
> Necessarily.
>
> How could that be something which never holds in the same way? If it ever holds in the same way, then in that time it is clear that nothing changes; if it always holds in the

> same way and is the same, how could this change and move, not departing from the form of itself?
>
> In no way.
>
> Nor could it be known by anyone. At the moment when he who seeks to know is upon it, it becomes other and different, so that which it is and how it holds can no longer be known, and clearly there is no knowledge that knows what holds in no way.
>
> It is as you say (439d8-440a5).

Socrates next seems to argue that if everything is always changing in every way, then there are no conditions that would count as instantiating knowledge:

> But we cannot even say that there is any knowledge, if all things are changing and nothing remains. If this itself, knowledge, does not change and cease to be knowledge, then always knowledge would remain and be knowledge. If the Form itself of knowledge changes, then at the same time as it changes into a kind other than knowledge it would not be knowledge, and if it always is changing, then there always would not be knowledge, and by this reasoning there will be neither nothing to know nor anything to be known. But if there is always that which knows and that which is known, if there is the beautiful, the good, and one each of the other beings, then I do not believe there is any likeness between these of which I am now speaking and flux and motion (440a6-c1).

These passages are obscure, to say the least, but they suggest that Socrates argues against a straw man. To show that the Heracliteans have fallen into a "whirlpool," Socrates seems to make them understand their flow doctrine in a way that is unnecessarily weak and that is not the most likely competitor to the Theory of Forms.

Although he proceeds more cautiously in the *Theaetetus*, the outcome is the same. The main question is "What is knowledge?," and in the first section of the dialogue Socrates plays midwife to Theaetetus's answer that "knowledge is perception" (151e2-3). He notes that Theaetetus has come out with a proposition that one might

expect of an older and more "sophisticated" person. He says that Theaetetus has answered as Protagoras would (151e8-152a3), and the conversation turns to whether the measure doctrine is true.

Socrates does not quickly dismiss the doctrine, as he does in the *Cratylus*, but he rejects it for the same reason. He argues that it wrongly entails that no man can be wiser than another (*Cratylus* 386c2-d2; *Theaetetus* 179a10-b5). After he rejects the measure doctrine, Socrates turns his attention to the flow doctrine:

> We shall have to consider and test this moving being, and find whether it rings true or sounds as if it has some flaw (179d2-4).

Since, according to Theodorus, the Heracliteans are not clear about what they mean when they declare that everything is always flowing (179e2-180c6), Socrates agrees to distinguish the kinds of flowing that they could have in mind. He distinguishes spatial movement and alteration (181b8-d7), and he and Theodorus agree that the Heracliteans mean that everything is always flowing in both ways (181d8-e4).

Socrates argues that, in this case, the flow doctrine has an absurd consequence. The reasoning is not very clear, but Socrates seems to argue that if at a given time a given thing is changing in every way, then it is both F and not-F. His argument seems to depend on the following three premises:

(a) if x is changing in every way, x is becoming not-F and becoming F;
(b) if x is becoming not-F and becoming F, x is not yet not-F and not yet F;
(c) if x is not yet not-F and not yet F, x is F and is not-F.

Socrates and Theodorus first agree that if a given thing were just moving through space, and not changing in every way, then throughout at least part of its journey it would be a certain way, say, white. They also agree that if it were also changing in every way, then it would not be white:

> If they were only moving through space and not altering, we should be able to say of what sort the moving things flow?
>
> That is right.
>
> Since, then, not even this abides, that what flows flows white, but it changes, so that there is a stream of this very thing, the whiteness, and it is passing over into another color, lest it be convicted of standing still in this respect, can one ever call it any color, so that he calls it correctly?
>
> How can that be done, Socrates? Nor yet anything of that sort, if, inasmuch as it is a stream, it is always slipping away as you speak.
>
> And what are we to say about a perception of any sort; such as, seeing or hearing? Are we to say that as seeing or hearing it remains in itself?
>
> Necessarily not if all things are in motion (182c9-e2).

Socrates next appears to argue that the point holds for predicates and their negations, that if everything is always flowing, then, in virtue of (a) - (c), both not-F and F are true of the same subject:

> Then it has no right to be called seeing any more than not seeing, nor any other perception more than not, if it be admitted that all things are in motion in every way?
>
> No, we may not.
>
> And so our answer to the question, What is knowledge?, gave something which is no more knowledge than not.
>
> It seems as if it did.
>
> A fine way this turns out to be of making our answers right. We were most anxious to prove that all things are in motion, in order to make that answer come out correct, but what has really emerged is that, if all things are in motion, every answer, on whatever subject, is equally correct, to say both that it is thus and that it is not thus--or if you like becomes, as we don't want to use any expressions which bring our friends to a stand-still.
>
> You are quite right (182e3-183a8).

Theodorus agrees with Socrates, and one would expect the conversation to be over. Socrates has shown that the flow doctrine is absurd, that it entails that everything is both F and not-F.

Socrates, however, is not yet completely satisfied and decides to press his case further. 183a8 continues as follows:

> Except, Theodorus, that I said thus and not thus. One must not say this thus, for this thus would no longer be in motion. Nor again not thus, for this is not a motion. The exponents of this theory need to establish some other language, since, as it is, they have no words that are consistent with their hypothesis--unless it would perhaps suit them best to use not thusly mostly, being said in an indefinite way (183a9-b5).

His point, apparently, is that the flow doctrine is so extremely radical that it cannot be stated in the language of the day. This language supports inferences such that any attempted statement of the idea that stands behind the flow doctrine would entail that everything is F and not-F, and the extreme Heracliteans cannot accept this consequence, since in this case there would be a way in which things hold. In this case, contrary to the Heraclitean doctrine that everything is always flowing in every way, things would always have the property of being F and not-F.

v. Two mistakes

Given Plato's argument against the Heracliteans, and its similarity to his argument against the lover of spectacles, perhaps Aristotle failed to distinguish the two arguments. Socrates, recall, forces the lover of spectacles to admit that "each of the many things <is no> more than it is not that which one says it to be" (479b9-10). This is the very same conclusion that, in the *Cratylus* and the *Theaetetus*, Socrates forces the Heracliteans to accept. Aristotle, perhaps, could have "carelessly assimilated" these two arguments.

The arguments, of course, are distinct. Socrates forces his respective opponents to the same absurd conclusion on the basis of two different assumptions. The lover of spectacles does not begin with the

radical flow doctrine. He may accept this doctrine, but in the context of the Socratic challenge, he denies that the Forms exist in reality as substances. Instead of accepting that the essences of justice, beauty, etc., are starting-points in reality, the lover of spectacles only recognizes "the many conventions (*νόμιμα*) of the many" (*Republic* 479d3-4). The Heracliteans may be lovers of spectacles, but Socrates does not force them into absurdity on this basis. He appeals to the radical flow doctrine. He argues that "if all things are motion, every answer, on whatever subject, is equally correct, to say both that it is thus and that it is not thus" (*Theaetetus* 183a4-6).

If Aristotle failed to distinguish these two arguments, this alone would not fully explain how he came to the mistaken views about the development of Plato's thought. It would not explain why he believed that Plato supposed that the sensibles are in radical flux. Aristotle must be guilty of some further confusion, and once again, Annas makes remarks that could in principle point in the right direction:

> Aristotle's account of the theory of Forms can be questioned. It is true that in the dialogues Plato does often talk about Forms in a way which emphasizes their stability and fixed nature in contrast with the changeable and therefore unsatisfactory nature of physical objects (for example, *Symposium* 207c-208b, *Phaedo* 78e-79d, *Republic* 485b, 508d, 534a). But the flux argument as Aristotle presents it is nowhere to be found explicitly in the dialogues. Indeed, some parts of the dialogues suggest that Plato could not have accepted it. In the *Theaetetus*, which Aristotle knew (cf. 1010b11 ff.), Plato refutes the Heracleitean theory that physical things are always in flux in every way... (p. 153).

Annas correctly notes that Plato often contrasts the eternal and unchangeable Forms with the transitory and changeable ordinary objects of experience, and she quietly hints that Aristotle may have misunderstood the intended contrast.

Plato does contrast Forms with the sensibles, and, indeed, a reader could misunderstand this contrast. Plato does not make his intent as clear as one might hope. Witness, e.g., the way he puts the contrast in following passages from the *Phaedo*:

> Then let us go back to those entities to which we turned in our earlier argument. Does the being itself, whose being we give an account of in asking and answering questions, always hold similarly and the same, or is it other at other times? Does the equal itself, the beautiful itself, what each thing is itself, that which is, ever admit of any change whatever? Or does what each of them is, being uniform alone by itself, hold similarly in the same way, and never admit of any kind of alteration in any way or respect whatever?
>
> It must be unvarying and constant.
>
> But what about the many beautiful things, such as men or horses or cloaks or anything else at all of that kind, or equals, or all things that bear the same name as those objects? Do they hold in the same way, or are they altogether opposite (*πᾶν τοὐναντίον*) of those others, and in respect to themselves and to others are they almost (*ὡς ἔπος εἰπεῖν*) in no wise in the same way?
>
> That is their condition. They never hold similarly (78c10-e5).

> Now, Cebes, were we not saying a moment ago that whenever the soul uses the body as a means to study anything, either by seeing or hearing or any other sense--because to use the body as a means is to study a thing through sense perception--then it is dragged by the body into the things that never hold in the same way and it wanders about itself, and is troubled and dizzy, as if stupefied, because of contact with such things?
>
> Certainly, Socrates (79c2-8).

Plato does not say that the sensibles are in radical flux, but his words are not especially clear. A reader could misunderstand the intended contrast. He could conclude that the Forms are never changing in any way and that the sensibles are always changing in every way.

If Aristotle failed to distinguish the argument against the lover of spectacles and the argument against Cratylus and the extreme Heracliteans, this further confusion would explain how he could be incorrect about the origin of the Theory of Forms. On this interpretation, Aristotle believed that Plato supposed that the sensibles

are in radical flux. Aristotle also conflated the argument against the lover of spectacles with the argument against the Heracliteans. He believed that, in each case, Plato argued that if everything is in radical flux, then knowledge is impossible. On the basis of these two false beliefs, and on the basis of the true belief that Plato agreed with Socrates that knowledge is possible, the argument from flux could have been born. Aristotle could have concluded that Cratylus and Socrates come together in Plato to issue in the Theory of Forms.

If Aristotle did make these two mistakes, and I do not claim that he did, then, to borrow Plato's metaphor, the *Metaphysics* passages are "whirlpools" that threaten to "drag down" those who seek to understand the genesis of the Theory of Forms. These passages would incorporate a misreading of the development of Plato's thought, and this misreading would have stood as one of the longest standing misunderstandings in the history of Platonic scholarship. The argument from flux, on this interpretation of Aristotle's remarks, is not an argument that Plato claims for himself. It is an Aristotelian assimilation of various thoughts that Plato expresses in various parts of the corpus.

vi. Forms are not "in" sensibles

Although Aristotle could in principle have made these mistakes, an alternative interpretation of his remarks is possible. Aristotle is much more philosopher than historian. His explanation of the development of Plato's thought is not likely to contain the sort of detail that would please an historian. Aristotle is not especially interested in historical detail. His concern is with the philosophical issue. He intends his remarks to focus the fundamental difference between their two metaphysics. Aristotle passes over in silence the points of agreement. In the context of his remarks, he recognizes no necessity to voice his agreement with Plato against the lover of spectacles. Like Plato, however, Aristotle does not allow claims about justice, beauty, etc., to depend on "opinions" and "fancies." In the context of his remarks, Aristotle recognizes no necessity to agree that definitional truths are necessary for the possibility of knowledge. Plato and Aristotle both work within the Socratic tradition. In his explanation of the origin of the Theory of Forms, Aristotle's primary concern is show where Plato went wrong. He insists that Plato went wrong in his conclusion that

essences fit into reality by existing separately and as substances. Aristotle explains that "<s>eparation is responsible for the difficulties arising about the <Theory of> Ideas" (1086b8).

Thus, in his presentation of the "argument from flux," Aristotle's motivation is philosophical. He is trying to highlight what he takes to be the underlying mistake in Plato's attempt to fit essences into reality. He seems to argue that the mistake is to suppose that, because the sensibles are "flowing," they cannot provide a stable foothold for the existence of essences, and that therefore essences must fit into reality as substances and ontological starting-points. Aristotle makes Plato argue from

(5) knowledge has starting-points
(2) the sensibles are flowing
and (6) If (2) is true, the sensibles are not starting-points of knowledge

to the conclusion that

(4) the universals exist separately.

On the basis of the conditions for knowledge and the instability of ordinary objects of experience, Aristotle makes Plato draw a conclusion about how essences exist. He makes him conclude that they are not "in" sensibles, but exist separately and as substances.

This interpretation has many important virtues. It is consistent with the obvious fact that both Plato and Aristotle are philosophers of rare depth and insight. Aristotle does not unfairly saddle Plato with more problems than he deserves. He does not make Plato be a skeptic concerning knowledge about the sensibles. Nor does he make Plato accept the extremely implausible and paradoxical doctrine that these objects are always changing in every way. Furthermore, given his close proximity to Plato, his evident ability as a critic, and his deep interest in the problems that motivate the Theory of Forms, Aristotle is not likely to be wrong about Plato. On this interpretation, Aristotle does not misread Plato. His remarks in the *Metaphysics* do not stem from a "careless assimilation" of unrelated arguments that Plato expresses in different parts of the corpus.

Another important virtue of this interpretation is that it helps to shed light on Plato's reasons for concluding that the Forms are substances. In the autobiography in the *Phaedo*, in his own attempt to chart the genesis of the Theory of Forms, Plato argues for Socrates's method of inquiry and argues against the method of the Ionian natural scientists. His remarks in this passage are compressed, but his point seems, at the very least, to be that the natural scientists recognize no need to find a place in reality for essences because in their search for knowledge they do not recognize the priority of definition. Aristotle's explanation helps to amplify this line of thought. It suggests that Plato believes that even if the natural scientists wanted to recognize the priority of definition, they could not satisfy this desire because there is no place for "intelligible" (*νοητός*) objects in their conception of reality. As Aristotle reports in book I of the *Metaphysics*, the natural scientists in the Ionian tradition take as their starting-points certain "sensible" (*αἰσθητός*) objects, such as portions of water, air, etc., and they try to explain everything else that exists as modifications of these basic objects. Plato rejects this approach as inadequate. He believes that this conception of reality makes knowledge impossible because it cannot account for the existence of the definitional truths that are necessary for knowledge. The argument from flux suggests that he believes that because the sensibles are "flowing," they cannot provide a stable foothold for the existence of essences.

Yet another important virtue of this interpretation is that it makes Aristotle's explanation be consistent with Plato's thought in the *Timaeus*. The *Timaeus* revisits some of thoughts first aired in the *Phaedo*, and as I shall show in the next chapter, Plato has his character, Timaeus, argue that about matters involving fire, water, and the other stuffs that are traditional in Greek cosmology, the Ionian cosmologists accept a conception of reality that makes knowledge impossible because it makes definitional knowledge impossible. He argues that the Ionian scientists cannot answer the "What is F?" question by pointing to nature and attempting to give an ostensive definition. He maintains that the sensible objects of such demonstrative pointings do not have enough "firmness" (49d7), and are not "steadfast" (e3) enough, to provide "accounts" (λόγοι) that are

"trustworthy and firm" (49b5) enough to provide for the possibility of knowledge about matters involving fire, water, and the other stuffs.

vii. Against traditional interpretations

Many important scholars hold a different view. They maintain that Plato was a skeptic concerning knowledge about the ordinary objects of experience because, under the influence of Cratylus and the extreme Heracliteans, he came to believe that the ordinary objects of experience are always changing in every way. Sir David Ross, e.g., puts forward this interpretation. He maintains that the evidence for it is nearly omnipresent in the dialogues:

> According to <Aristotle at *Metaphysics* 987a30>, Plato's philosophy 'in most respects followed the Pythagoreans,' but was modified by two other influences:--(1) an early acquaintance with Heraclitean views, as represented by Cratylus, and a consequent conviction that as sensible things are always in flux, they cannot be the objects of knowledge;... ([1924], p. xlv).

> The recognition of the flux of all sensible things and the consequent impossibility of knowledge of them is present through-out the dialogues as the underlying assumption which does not need to be often emphasized because it is so unquestioningly taken for granted (p. xlvii).

> Plato was, then, as Aristotle says, convinced of the truth of Heraclitus' doctrine that the world of sense is in constant flux, and that what is in constant flux cannot be known. But he was equally convinced that knowledge exists, and therefore that there must be non-sensible entities which are the objects of knowledge. Thus the theory of Ideas was built on the foundation of Heracliteanism ([1953], p. 157).

Ross, indeed, is so confident that he is repeating a commonplace that he does not bother much with evidence from the Platonic corpus. He only cites three passages from the middle dialogues:

> According to Aristotle <in the *Metaphysics* at 987a32-b7>, Plato's earliest philosophical association was with Cratylus the Heraclitean, and he retained the belief that all sensible things are in constant flux; but when he had come under Socrates's influence he held that because of their changeability not they but something else must be the object of knowledge. This is just what we find in the *Cratylus* <at 439b4-440c1> (p. 20).

> Even without Aristotle's testimony we should know that Plato had been influenced by Heracliteanism. There is a striking passage in the *Symposium* <at 207d2-208b6> in which he speaks of the transitoriness of all things human--not only of hair, flesh, bones, blood, and the whole body, but of habits, traits of character, opinions, desires, pleasures, pains, fears, knowledge. In the *Phaedo* <at 78c10-79a11> the same thought is repeated, and there the transitoriness of such things is contrasted with the eternalness of Forms, equality itself, beauty itself (p. 156).

Ross cites the passages from the *Symposium* and the *Phaedo* to show that the influence of Cratylus and the Heracliteans is not based solely on Aristotle's testimony. Plato, however, never even mentions the Heracliteans in these two passages, and given that they hardly demand the interpretation that he puts on them, Ross must do more than merely cite these passages if he is to support his position.

Although he is the most famous, Ross is not the only scholar to endorse this interpretation of Plato. John Brentlinger, e.g., writes:

> That <Plato> did accept <the flux doctrine> is certain ([1972a], p. 62). For the texts in which this is unqualifiedly asserted, see *Cratylus* 439b, and *Phaedo* 78e and 79c. A later, more detailed exposition, but one which leaves open whether it is Plato's position, is to be found at *Theaetetus* 181cff (n. 5 on p. 62).

> The flux position is that all particulars change in all respects at all times. This is the position Plato sets forth in the *Theaetetus* as the position of the Heracleiteans, and I take it to be identical to the position held in the *Phaedo*, in which

> he describes sensibles as "never the same" (*οὐδαμῶς κατὰ ταὐτά Phaedo* 78e, 79c) (n. 3 on p. 61).
>
> A short passage in the *Cratylus* (439b-440e) is the only place prior to the *Theaetetus* where we find a moderately detailed statement of Plato's position on change. The passage contains a number of different arguments, and is rather disjointed and obscure, yet is clear on three main points: (a) Plato wants to assert that particulars are in flux; (b) he believes that whatever is in flux is unknowable and even incapable of being the object of ostensive reference; and (c) he believes that whatever is in flux is intrinsically indefinite--i.e., has no properties whatsoever ([1972b], pp. 133-134).[13]

Robert Bolton makes similar assertions, and he adds book V of the *Republic* to the list of alleged support for this interpretation:

> At the end of Book V <of the *Republic*> Plato draws a distinction between two types of entities--what "purely is" and what "at the same time both is and is not" (478d5-7). The entities of the latter type make up the realm of becoming. And Plato says of them that "they no more are *whatever* anyone may affirm them to be than not" (479b9-10). Plato does not mean by this that these objects have contradictory predicates true of them. The claim is weaker than that. They may be beautiful in a way (*πως*, 479b1) but if so they will also be ugly in a way. But, strictly, they cannot even be both beautiful in a way and ugly in a way. *Whatever* they may be said to be they are only in a way, and in a way not (c3-5). Nothing one can say of them is ever sufficiently qualified to be strictly true. In this respect the doctrine of the *Republic* coincides with the doctrine of the extreme Heracliteans ([1975], pp. 77-78; emphasis in original).
>
> <I>t is Plato's explicit aim in this passage that one cannot have *any* knowledge of sensible objects. The *only* reason which he gives for this contention, moreover, is that these objects no more are than are not *whatever* one may say they

> are (479b). And this reason suffices only if we take it literally (p. 78; emphasis in original).
>
> <In the *Phaedo*,> the being-becoming distinction is introduced by means of the contrast between those things which are 'always constant and unchanging' and those which are 'different at different times and never constant' (78c). To put the contrast in this way does not by itself commit Plato to the extreme flux doctrine..., <b>ut subsequently Plato goes much further than this and says that these entities are 'exactly opposite' (*πᾶν τοὐναντίον*, e2-e3) to those things which never change in any way (d6-7). They are 'so to speak, never constant with respect to those other things or to themselves in any way' (e3-4). They are not only never unchanging (*μηδέποτε κατὰ ταὐτά*) they are never in any way unchanging (*οὐδέποτε οὐδαμῶς κατὰ ταὐτά*). And this is the extreme thesis. Plato does qualify the claim that these objects are never unchanging in any way by the addition of the phrase 'so to speak' (*ὡς ἔπος εἰπεῖν*). And this phrase, like its companion *ὡς εἰπεῖν*, often has the restrictive force of 'generally speaking' in Plato. But these phrases, like 'so to speak,' may also be used in ways that do not put such a qualification on what is said. The phrase may be used as a stylistic filler included for emphasis and best translated by a phrase such as 'in fact.' That Plato is using the phrase in this way is required by the context. He has just said of the objects in question that they are 'exactly opposite' (*πᾶν τοὐναντίον*) to those things which 'never in any way admit of any change' (p. 82).

If Bolton's interpretation is correct, Plato accepted some sort of "extreme" form of the flow doctrine and concluded that knowledge about the ordinary objects is impossible.

Bolton rests his interpretation in part on the discussion of the philosopher and the lover of spectacles in the *Republic*, but serious obstacles stand in the way of his reading. In this passage, as he reads it, "Plato's explicit aim... <is> that one cannot have *any* knowledge of sensible objects." This aim is exceptionally bold, and to accomplish it, Bolton makes Plato appeal to an equally strong premise. He claims that Plato comes to this skeptical conclusion on the basis of the

paradoxical proposition that the ordinary sensible objects of experience "no more are than are not *whatever* one may say they are."

Plato could in principle accept this paradoxical proposition, but it would undermine one of the most important points in the *Republic*. It would undermine his claim against the lover of spectacles. This claim is based on the fact that the lover of spectacles accepts a conception of reality according to which there can be no knowledge with respect to whether a given πόλις is just. This is why the lover of spectacles is not fit to rule. He is "not very different from the blind" (484d4). Only the philosopher "can keep looking back and forth, to justice, beauty, temperance, and all such things as by nature exist, and can compose human life with reference to these..." (501b1-4).

The problem for Bolton's interpretation is not that it is contrary to a principle of charity because it reveals that Plato is inconsistent,[14] but rather that Plato just does not say what Bolton claims for him. Plato does not argue anywhere in the corpus that "one cannot have *any* knowledge of sensible objects." In book V of the *Republic*, contrary to Bolton's interpretation, Socrates argues that the lover of spectacles cannot have knowledge about the sensible world. Because the lover of spectacles denies that the Forms are substances, and thereby identifies the one Form with the many conventions, he cannot know of any given πόλις that it is just. For the properties that he uses his "What is F?" question to ask about, Socrates insists that whoever denies that the Form the F itself exists "itself according to itself" (αὐτὸ καθ' αὑτό) cannot know of a given object of experience that it is F. Without this Form, according to Plato, there is nothing to know because there is no fact about what features something must have to be F.

Ross, Brentlinger, and Bolton cite passages in the *Phaedo* to support their interpretations, but no where in this dialogue does Plato give any clear indication that he believes that "all particulars change in all respects at all times." As Bolton notes, the phrase ὡς ἔπος εἰπεῖν has different uses. It can be used with "restrictive force." This phrase is "often used to limit too strict an application of a general statement, especially πᾶς ('all') and οὐδείς ('none')" (Smyth [1956], section 2012.b; translations added in parenthesis). The phrase also can be used in a way that it does not have this restrictive force, and Bolton maintains that Plato uses it this way at 78e4. This use is "required by

the context," according to Bolton, because Plato just said that the Forms and the sensibles are πᾶν τοὐναντίον (e2-3).

If the "context" is fixed as Bolton maintains, it surely does nothing to settle the question. Plato could use the phrase ὡς ἔπος εἰπεῖν in either way, depending on how he intended his earlier use of πᾶν τοὐναντίον, which need only be translated as 'altogether opposite,' not as 'exactly opposite,' as Bolton translates it. If Plato intended to restrict the quantifier, as I think, then 'almost' is an appropriate translation.[15] If he intended leave the quantifier wide open, as Bolton thinks, then 'in fact' is an appropriate translation.

To fix the context in a way that really settles the matter, it must contain Socrates's subsequent remarks on the longevity of the body. In these remarks, Socrates tries to convince Cebes that although the human body is not eternal and unchangeable, it can remain intact for a very long time:

> Now you are aware that when a man has died, the part of him that is seen, his body, which is situated in the seen world, the corpse as we call it, although liable to be dissolved and fall apart and to disintegrate, undergoes none of these things at once, but remains as it is for a fairly long time--in fact for a considerably long time, for if someone dies with his body in beautiful condition, and in the flower of youth, why the body that is shrunken and embalmed, like those who have been embalmed in Egypt, remains almost for an immensely long time, and even should the body decay, some parts of it, bones and sinews and all such things, are still almost immortal...(80c2-d2).

This passage should remove absolutely all doubt about how Plato intends to use the phrase ὡς ἔπος εἰπεῖν at 78e4. Socrates and Cebes agree that "the body remains as it is for a fairly long time" (c5-6). Plato did not intend to use the phrase to mean "in fact."[16] He did not believe that the sensibles are always changing in every way.

Ross and Brentlinger cite 439b-440e in the *Cratylus* to support their interpretations, and although they merely state their position, and do not argue that this passage shows that Plato believes that sensibles "change in all respects at all times," other scholars have argued for this

reading. Gulley cites this passage, and he argues that it shows that Plato believes that, because they are in radical flux, the sensibles have "no determinate characteristics and can have no significant description applied to" them. He writes:

> <T>he argument begins and ends with an assertion of the thesis that non-sensible realities exist, and it is clear that Plato considered the assumption of their existence essential in opposing the flux doctrine. Why is this assumption considered essential? It is obvious that Plato does not think it enough, in opposing the flux doctrine, to put forward the logical argument that the doctrine has the apparently absurd consequence that nothing can be known, but thinks it necessary to select one special class of objects, the non-sensible 'realities,' and to emphasize that these cannot known if they are in flux. And his reason for thinking this necessary must be that he considered that if these non-sensible 'realities' were in flux then it would in fact be the case that nothing can be known. His argument thus implies his acceptance of the flux doctrine as true for sensibles (pp. 71-72).

> The position is, then, that Plato, at least implicitly and almost certainly explicitly also, is accepting the flux doctrine as true for sensibles. He had, of course, earlier in the *Phaedo* made clear his view that sensibles are constantly changing and that his is reason for condemning perception as incapable of yielding truth (78c-80b, 83b). And that he accepted the flux doctrine as true for sensibles is stated by Aristotle in two passages in the *Metaphysics* (987a32-b7, 1078b12-17) where he is explaining that Plato's acceptance of the flux doctrine as true for sensibles led him to postulate non-sensible Forms in order to save the possibility of knowledge (p. 73).

> Thus the evidence of the *Cratylus* is by no means the only evidence for Plato's acceptance of the flux doctrine. Yet it does deserve special emphasis and consideration. For it is the only place in the dialogues where Plato clearly shows

> that he considered the specifically Heraclitean doctrine of flux to be true for sensibles (p. 73).
>
> <I>n the *Cratylus* Plato affirms that no significant description can be applied to what is in flux; one cannot describe it as 'that' or as 'of such a kind,' because it is never in any determinate condition (pp. 73-74). <T>he *Cratylus* clearly shows that Plato accepted the Heraclitean doctrine of flux as true for sensibles, and hence accepted as true for sensibles the consequences that what is in flux has no determinate characteristics and can have no significant description applied to it (p. 75).

Gulley maintains that the fact that Plato emphasizes the Forms in his argument against Cratylus at 439c1-440c1 would be otherwise inexplicable if Plato did not believe that the only point in dispute is whether these objects are in radical flux. Gulley maintains that Plato is concerned to "save the possibility of knowledge" and agrees with Cratylus that there is no knowledge with respect to the sensibles, since they are caught up in radical flux.

Gulley's argument is very weak. First of all, the passages from the *Cratylus* are much too unclear to provide justification for a such substantive claim. If, as Gulley claims, the end of the *Cratylus* "is the only place in the dialogues where Plato clearly shows that he considered the specifically Heraclitean doctrine of flux to be true for sensibles," then the evidence is inconclusive. Secondly, unless Plato later changed his mind, the *Cratylus* does not show that he believes that an explicit introduction of a third realm of Forms is necessary to refute the flux doctrine. In the *Theaetetus*, e.g., Socrates convinces his interlocutors to reject the flux doctrine, but he does not introduce the Forms. There is no reason, furthermore, to suppose that Plato emphasizes the Forms because he believes that he and the Heracliteans are otherwise in agreement. He could easily believe that the most important disagreement is over these objects.

This interpretation is intrinsically likely, since if he were to accept the paradoxical view that the sensibles were in radical flux and that nothing is true about them, he would undermine the main question in the *Cratylus*. The topic of conversation is about "words," and although

Socrates never asks his interlocutors to agree that language users typically know the type of a given word-token, surely this is an assumption that all parties take to be evident. If Plato really believed that all sensibles were in so much flux that no one could know anything about them, I doubt that he would have so much enthusiasm to write at such length about the "correctness of words."

Gulley is mistaken. The *Cratylus* does not "clearly" show that Plato believed that "Heraclitean flux doctrine is true for sensibles" and that they consequently have "no determinate characteristics."

Irwin accepts the broad outline of Aristotle's explanation of the Theory of Forms, but unlike Ross, Gully, Brentlinger, Bolton, and other like-minded scholars, he tries to supply the missing detail so that Plato is neither a skeptic nor a radical Heraclitean about the ordinary objects of experience. Irwin writes:

> Some have thought there is ample evidence that Plato believes the sensible world is constantly changing and therefore unknowable, just as Aristotle appears to say. But this alleged evidence is faulty ([1977a], p. 2).
>
> According to Aristotle, Plato's Heracleitean views, applied to Socrates' search for definitions stimulated him to separate the Forms; since sensible things are always in flux, there can be no knowledge of them... ([1977b], p. 148). The separation of the Forms relies, as Aristotle says, on a doctrine of flux (p. 153).
>
> Aristotle comments that Plato separated the Forms as objects of knowledge because sensible things are always in constant change, Heracleitean flux, and so unknowable. ... I want to show that Aristotle is right, but only if we reject the most common interpretation of his remarks on flux ([1977a], p. 1).

The key to Irwin's more charitable proposal is novel interpretation of the flow doctrine that Aristotle attributes to Plato. Irwin rejects what he takes to be "the most common interpretation" of this doctrine. He suggests, instead, that it should be understood as a proposition about the compresence of opposite properties:

> <Heraclitus's> "unity of opposites" includes... things with compresent opposite properties--the road up and down, the straight and crooked writing, the food which is good (for some people) and bad (for others) (Heracleitus, B59-61). Let us call this *aspect-change* (*a*-change): *x a*-changes iff *x* is F in one aspect, not-F in another, and *x* is in the same condition when it is F and when it is not-F (e.g., *x* is big in comparison with *y*, small in comparison with *z*) (p. 4; emphasis in original).

Irwin suggests, furthermore, that Plato would not go wrong if he were to accept the flow doctrine so construed:

> Plato can fairly claim that sensible properties are in flux, because opposite moral properties are compresent in them, and they a-change from being beautiful (e.g.) to being ugly in different situations--bright color changes from being beautiful in this temple to being ugly in that one (p. 10).[17]

Irwin thus squares Aristotle's explanation of the origin of the Theory of the Forms with his own explanation of Plato's thought. Irwin argues that Plato has fallen prey to a simple confusion, that he argues for the ontologically innocent proposition that justice, beauty, etc., are not definable in terms of sensible properties, but invalidly jumps to the metaphysical conclusion that the Forms are substances.

I fully agree with Irwin's attempt to understand Aristotle's explanation in a way that makes Plato be neither a skeptic nor a radical Heraclitean about the ordinary objects of experience, but I do not believe that his interpretation is very plausible. To save Plato from the twin evils of skepticism and radical flux, Irwin subjects him to a straightforwardly bad argument for the central proposition in the Theory of Forms. Plato fell into this bad argument, according to Irwin, because he did not fully appreciate that "sensibles" include both sensible properties and sensible particulars ([1977b], p. 155). Plato could in principle have been confused in this way, but the dialogues provide very little evidence for this interpretation.

Indeed, as I have already shown, the *Phaedo* and the *Republic* suggest a very different interpretation. They suggest that Plato came to believe that the Forms are substances, not because he fell into a

confusion over sensibles, but because he came to believe that no other way of fitting essences into reality would validate the leading assumptions in Socrates's method of intellectual inquiry. Since Aristotle's remarks in the *Metaphysics* passages can easily support a reading that confirms this interpretation, this is clearly how they should be understood.

5

FORMS AND THE FOUR KINDS OF STUFF

i. Introductory remarks

Near the beginning of the second main part of the *Timaeus* (47e-69a), Plato once again argues against an opponent who accepts an ontology in which essences are not starting-points.[1] His opponents are the Ionian cosmologists. As starting-points in their ontology, they accept neither the Receptacle nor Forms. The starting-points in their ontology are sensible objects, such as the portions of fire, water, etc., that are traditional in Greek cosmology. Plato has his character, Timaeus, argue against this ontology.[2] He argues that the Ionian ontology is part of a conception of reality that is inconsistent with the possibility of knowledge about matters involving stuffs of the four kinds.

ii. Eternal Forms versus transitory sensibles

After the first remarks, and in the prelude to the first main part of the dialogue, the topic of conversation turns to a question about "the whole firmament" (28b2) or "cosmos" (3).[3] The question is whether this "thing" has come into being or exists eternally (27c5). Timaeus tries to determine the answer by deduction from a more general framework. This framework consists of two propositions about objects and how they exist. Timaeus maintains that "sensible" (*αἰσθητός*) objects come into being and that "intelligible" (*νοητός*) objects exist eternally. Timaeus introduces this metaphysical framework in one of the most important passages in the corpus. It reads:

> Now, in my opinion, we first of all have to make this distinction: what is that which is always, and has no birth (*γένεσις*), and what is that which comes into being [always],[4] and never is? The one is grasped in thought with the help of reason, is always in the same way; the other opined in belief with the help of non-rational perception,

> comes into being and passes out of being, but really never is (27d5-28a4).[5]

Armed with "this distinction," Timaeus is ready to decide whether the cosmos has come into being or exists eternally. He makes this decision in the following passage:

> The universe--or cosmos or whatever name it should receive, this let us name it--we must first inquire about it, which we laid down that it is necessary to inquire about all things, whether it was always, not having a source of birth, or came into being, beginning from some source. Came into being; for it can be seen and touched and it has body, and all such things are sensible, and we said that the sensible, grasped in belief with the help of perception, comes into being and is brought forth by birth (28b2-c2).

Timaeus decides that the cosmos has not always existed. He argues that because it can be sensed, i.e., seen, touched, etc., it is a sensible object. He argues that because all sensible objects have come into being, the cosmos has come into being.

These two passages are important for Platonic scholarship, not so much because they contain this argument that the cosmos is sensible and has come into being, but because they show Plato once again dividing objective reality into an intelligible realm and a sensible realm. This division should be very familiar from the *Phaedo*. Socrates gets Cebes to agree that there are intelligible and unchangeable Forms, and he gets him to agree that there are sensible and changeable things "that bear the same name as" the Forms (78e2). In these two passages from the *Timaeus*, Plato does not explicitly mention either the Forms or the ordinary sensible objects of experience. Later in the dialogue, however, in passages in which he again discusses objects that come into being and those that exist eternally, he is more explicit. Witness his remarks in 48e2-49a1 and 52a1-7:

> Our new starting-point in describing the universe must be a fuller classification than we made before. We then distinguished two kinds; but now a third must be pointed out. For our earlier discourse the two were sufficient: one

> postulated as a paradigmatic Form, intelligible and always in the same way; second, an imitation (μίμημα) of the paradigm (παράδειγμα), having birth and being visible.
>
> We must agree that one kind is the Form that holds in the same way, not brought forth by birth and indestructible, neither receiving anything else into itself from elsewhere nor itself entering into anything else anywhere, invisible and otherwise imperceptible, this is that which intelligence considers. The second is that which bears the same name and is like (ὅμοιος) it, sensible, brought forth by birth, carried about always, comes into being in a certain place and again from thence passes out of being, grasped in belief with the help of perception.

In these passages, as earlier in the *Phaedo*, Plato has his character contrast the Forms with the ordinary objects of experience. Timaeus says that the Forms are eternal and intelligible. He says that the ordinary objects are transitory and sensible, and he says that these sensible objects take their names from the Forms.

If this were all Timaeus said about the Forms and the ordinary objects of experience, his conception of reality would not be significantly different from the one that Socrates put forward earlier in the *Phaedo*, but, as perhaps is already evident from 48e2-49a1, Timaeus has much more to say about the most basic categories of existence. He is about to place an object on philosophical center stage that Socrates did not mention, or even suggest, in the *Phaedo*. In order to try to give a more accurate description of the cosmos, Timaeus is about to introduce a new "starting-point" and "third kind" into his ontology. This new starting-point is the Receptacle.

iii. Starting-points in ontology

Plato introduces the Receptacle in an effort to solve a certain problem concerning the stuffs of the four kinds that are "starting-points" (ἀρχαί) in traditional Greek cosmologies. To solve this problem, Plato modifies his pre-*Timaeus* conception of objective reality. 48e2-49a1 continues as follows:

> A third we did not then distinguish, thinking that the two would suffice, but now, it seems, the argument compels us to attempt to bring to light and to describe a form difficult and obscure. What nature must we conceive it to possess and what part does it play? This more than anything else: that the Receptacle is, as it were, the nurse of all birth (49a1-6).

> The third kind is the thing of space, being always, not receiving destruction, providing a seat for all that has birth (52a8-b1).

Plato believes that he needs some special object in addition to the objects that Socrates accepted earlier in the corpus and that Timaeus accepted earlier in the dialogue.

The problem whose solution requires the Receptacle is about the "birth" of the stuffs of the four kinds. He says that "men" have false beliefs with respect to these stuffs, and he intends to set them straight. He remarks:

> To this day no one has explained their birth, but as if men knew what fire and each of the others is, we speak of them as starting-points (ἀρχαῖ), positing them as letters of the universe, when in fact anyone who has ever so little intelligence should not rank them even so low as syllables (48b5-c2).

Timaeus complains that although their "birth" is in need of explanation, the many commonly and wrongly suppose that these stuffs are among the starting-points and "letters" of the universe.

Timaeus does not explicitly blame natural scientists in the Ionian tradition, but the prominence of their theories partly explains why the many have fallen into their false beliefs. The Ionian φυσιολόγοι started with the four kinds of stuff and used them to explain the essences of all other material kinds. They maintained that, in various combinations, portions of the stuffs constitute all other kinds of material objects.[6] Timaeus intends to argue against this ancient orthodoxy.

To demote the four kinds from the rank that the Ionians accord them, Timaeus provides a formal explanation of their existence. He

shows that sensibles of these kinds are not "letters" in the universe, but are explained in terms of more basic objects. One way he could proceed is to explain, in the style of the Ionian scientists, that portions of stuff of the four kinds are constituted from portions of even more basic kinds of stuff, but there are compelling reasons for supposing that this is not how he actually proceeds. He never mentions any more basic kinds of stuff, and he says that the Demiurge makes the cosmos out of the four kinds (31b6-33b1, 52d2-53b7, 69a6-c2).[7]

These reasons are perhaps proof enough, but there is another, even more telling reason for supposing that Timaeus and the Ionian scientists are not simply engaged in a family dispute over what stuffs are basic. Timaeus realizes that if he were to posit more basic kinds of stuff to constitute the traditional four kinds, he would not properly put to rest the request for explanation that he presses in 48b5-c2. He does not depart from the Ionians on the basis of an empirical discovery. He does not deny that the four stuffs are starting-points because he and his friends have discovered some kind of stuff that the Ionian researchers have overlooked. Timaeus departs from them on the basis of a belief about the possibility of knowledge and the nature of explanation. He believes that only intelligible objects, not sensible objects, are fit to be starting-points in a conception of reality that is consistent with the possibility of knowledge. Timaeus believes that intelligible objects are the starting-points for explanations of sensible objects.

Timaeus maintains that the Receptacle "shares in the intelligible" (51a7-b1, 52b1-2), and together with the relevant Forms, which are also "intelligible" (51c5, 52a4), it figures in his formal explanation of the existence of the four kinds of stuff. He does not explain its role very clearly.[8] He suggests that it is somehow like the role that the female generator plays in human sexual generation:

> We must conceive of three things: that which comes into being, that in which it becomes, and that from which in whose likeness that which comes into being is born. Indeed, we may fittingly compare the Receptacle to a mother, the from which to a father, and the nature between them to their offspring (50c7-d4).

In the ancient world, according to a standard theory of sexual generation, the male provides the form and the female provides stuff that somehow receives this form.[9] Plato makes Timaeus claim that the metaphysical situation is analogous.

The Receptacle, of course, is not analogous to the female generator because both provide stuff. The four kinds are the basic kinds of stuff, and the Receptacle is part of Timaeus's formal explanation of these kinds. His suggestion seems to be that the Receptacle provides a region to have sensible properties and that the Forms provide the logical claims that the presence of certain properties is equivalent to the presence of certain stuffs.[10] Witness his remarks:

> <T>he part of the Receptacle that is igneous appears as fire, and the part that is aqueous as water, and as earth and air as such parts receive imitations of these (51b4-6).

By providing such formal explanations, Timaeus demonstrates that portions of the four kinds of stuff are not starting-points. He explains these sensible objects in terms of intelligible objects. He explains, e.g., that portions of fire are regions of the Receptacle that possess certain properties and that the Form the fire itself marks the presence of these properties as equivalent to the presence of some fire.[11]

The text is compressed,[12] but Timaeus seems to argue for his explanations in a way that should be familiar to Plato's readers. In his autobiography in the *Phaedo,* and in book V of the *Republic*, Socrates argues that his opponents mistakenly embrace an ontology that is inconsistent with the possibility of knowledge about certain matters. Timaeus seems to believe that the Ionians make the same mistake. He argues that if, as is true in their ontology, the starting-points for reality are sensible objects, such as the portions of fire, air, etc., then to "know what fire and each of the others is" (48b6-7) is impossible, and if such knowledge is impossible, then equally impossible is knowledge that a given portion of stuff is, say, fire.

Indeed, given the Ionian ontology, the introductory remarks in the *Timaeus* encourage the reader to expect such an argument. Critias says that Timaeus "is better at astronomy than the rest of us and has made knowledge of the nature of the universe his chief study (27a3-5), but he does not mean that he is a natural scientist with no philosophical

training. Earlier in this same conversation, Socrates says that Timaeus has "returned from the heights of philosophy (20a4-5). Plato's readers should be surprised, therefore, if Timaeus is not concerned with the ontology necessary to answer the "What is F?" question. Earlier in the *Phaedo*, Plato pays tribute to Socrates for helping to canonize this approach to intellectual inquiry.

Although they have not made the connection to Socrates's arguments in the *Phaedo* and the *Republic*, other scholars have suggested that Timaeus is concerned with the ontology that is necessary for there to be answers to the "What is F?" question. Edward Lee made this point years ago in his 1967 paper "On Plato's *Timaeus*, 49D4-E7." He writes:

> With this analysis, we can now also trace some relations between <49d4-e7> and its wider context in the *Timaeus*. Plato had earlier complained that people think they know well enough "what the elements are" (48B5-7 *νῦν ... ὡς εἰδόσιν πῦρ ὅτι ποτέ ἐστιν, κτλ.*). The view he means, no doubt, was that these elements are just the material stuffs that we perceive.... On that view, anyone who seeks a λόγος of the elements--by asking, for instance, *τί ποτ' ἔστι, τὸ πῦρ*:--might (in principle, at least) be answered by presenting him with an actual sample of fire, pointing to it, and saying, *τοῦτο πῦρ ἐστι* (pp. 24-25). In short, they hold that there can be "ostensive definition" of the elements' names (n. 61 on p. 25). In 49B-E, Plato repudiates this view on the semantic ground that no proper λόγος can be had in reference to phenomenal substances (p. 25).

On Lee's interpretation, Timaeus denies that adequate "accounts" (λόγοι) for the terms *πῦρ* ('fire'), *ὕδωρ* ('water'), can be given by "ostensive definition." Lee says that Timaeus denies that a "proper λόγος can be had in reference to phenomenal substances." I reject the rest of his interpretation, but I fully agree on this point.[13]

The passages necessary to establish my interpretation are elliptical and difficult, but against the background of Plato's previous arguments in the *Phaedo* and in the *Republic*, I believe that the evidence is clear enough. In these previous dialogues, Plato has his character argue against those who try to provide for the possibility of knowledge with

an ontology in which essences are not starting-points. I believe that a similar argument occurs in the *Timaeus*. Timaeus argues that the Ionian ontology is inconsistent with the possibility of knowledge about matters involving fire, water, etc., because it cannot provide for adequate accounts for the terms that identify these kinds.

Timaeus begins with the assertion that "the argument compels" (49a3) him to introduce the Receptacle as somehow "the nurse of all birth" (5-6), and to help his interlocutors "more clearly" (7) understand this conclusion and his argument, he works through a problem concerning "fire and its consorts" (b1-2). He presents this problem in the following passage:

> Of them, to say which is the sort of thing that one must really call water rather than fire, and which any one, rather than some other or every other, in such a way as to employ a trustworthy and firm account (λόγος), is hard (2-5).

Although Timaeus is concerned with nouns, not adjectives such as δίκαιος ('just'), the problem that he describes appears essentially the same as the one that Socrates earlier put to the lover of spectacles. Timaeus does not work against a named opponent, and he does not work with a lot of fanfare about knowers versus opiners, but the problem that he describes appears to concern knowledge, and he seems to argue that those who reject the Receptacle and the Forms cannot solve this problem. He argues that those who accept such an ontology cannot explain the accounts for the terms ὕδωρ ('water'), πῦρ ('fire'), etc., in a way that makes them "trustworthy and firm" enough to provide for the possibility of knowledge.

Before Timaeus shows how he meets this challenge, he seems to intend his interlocutors to see that the Ionian cosmologists cannot meet it. This seems to be his intention in two examples, the cycle of becoming example and the gold example. These example situations involve portions of the four kinds of stuff and objects of various geometrical shapes:

> What we now call water we see, so we think, condensing and becoming stones and earth, dissolving and dispersing again this same thing <becoming> wind and air... from

> water <comes> earth and stone once more, thus in a cycle passing on their birth, so it seems (49b7-c7).
>
> <Suppose> someone were molding all shapes in gold, and never stopped remolding each into every other (50a5-7).[14]

With respect to each of these examples, Timaeus makes an assertion about a situation in which change occurs. His intent does not appear to be to argue that because objects change over time, no one can pick out some object as an object of a given kind. How this is possible is the problem that he has just mentioned at 49b2-5 and that he has just said is "hard" (49b5), but not impossible to solve.[15] Timaeus's intent, rather, appears to be that such demonstrations are impossible if the accounts are not "trustworthy and firm."

Timaeus seems to conclude that the Ionian cosmologists accept a conception of reality according to which one cannot know of a given object what it should be called:

> Since none of them ever appears the same, of which sort of them can one confidently assert to be this (τοῦτο), whatever it may be, and not another, without being ashamed of himself. It is not possible (49c7-d3).
>
> If someone were to point at some one of them, and ask what it is, by far the safest answer with regard to truth is to say that it is gold, but the triangle and whatever other shapes came to be in the gold, never to say these are, for they change during placing... (50a7-b4).

Since the Ionians do not accept the Forms, they cannot put forward such objects to determine that regions of the Receptacle with a certain property are portions of a certain kind of stuff. They must provide some other way of investing the terms ὕδωρ ('water'), πῦρ ('fire'), etc., with accounts that are consistent with the possibility of knowledge, and Timaeus seems to believe that they cannot solve this problem.

Timaeus seems to believe that the Ionians cannot solve this problem about "fire and its consorts" (49b1-2) because they cannot provide accounts that specify a "such-and-such" (τοιοῦτον)[16] that recurs in all

and only the places and at the times that portions of a given stuff come into existence. 49b7-d3 and 50a7-4 continue respectively as follows:

> By far the safest course is for us to propose to speak concerning these in the following way. Always that which we see coming into being at different times and in different places, for example, fire, not this, but what is such-and-such on each occasion to call fire, nor water this, but what is such-and-such always <to call water>, nor another <this>, as if it had some firmness, the things at which we point using the expressions this and that, we think we make something clear. For it runs off, not staying behind for of this or this or to this, or for any utterance that marks them out as beings that are steadfast. These each not to say, but rather what is such-and-such on each occasion always recurring like (ὅμοιος) to say, for indeed fire is what is throughout such-and-such, and thusly the whole of what has birth (49d3-e7).[17]

> but if what is such-and-such he should be willing to accept, with some degree of safety, be well content (50b4-5).

The point in these passages is not at all straightforward, but in the light of Socrates's previous arguments against the natural scientists and the lover of spectacles, a reasonable conjecture is that Timaeus intends to suggest that to provide "trustworthy and firm" accounts for the terms ὕδωρ ('water'), πῦρ ('fire'), etc., the Ionian cosmologists cannot fall back on ostensive definition. They cannot claim that language users create such accounts by pointing to nature and uttering sentences such as Τοῦτο ὕδωρ ἐστι ('This is water') and Τοῦτο πῦρ ἐστι ('This is fire').[18] Timaeus suggests that this practice is not sufficient to provide "trustworthy and firm" accounts because it is not sufficient to invest a given term with an account that specifies the τοιοῦτον (such-and-such) that recurs in all and only the places and times that portions of the relevant kind of stuff comes into existence.

Timaeus is correct, if this is his point, but he is hardly charitable. Terms for kinds of stuff cannot be meaningfully introduced into language by simply holding up a token word and pointing to the world. If the Ionians thought otherwise, they were mistaken. The procedure

is much more complicated, but Plato makes Timaeus show absolutely no interest in trying to uncover it.

One reason, perhaps, for this lack of interest is that Plato just did not think that any kind of observable linguistic practice could be sufficient to establish the objectivity, the ground for the existence of a distinction between correct and incorrect sincere application of a concept, that is necessary for the possibility of knowledge. In the *Republic*, certainly, with very little argument, he has Socrates assert that if essences must find their place among the "conventions" (*νόμιμα*) of the lover of spectacles, then objectivity and knowledge disappear and all that remains are the fancies of individuals and groups. Plato may not have not seen any promise in the attempt to ground objectivity in the linguistic practices of language users.[19]

Another possible interpretation of the passages, which attributes to Plato a slightly cruder way of making essentially the same point, is that Timaeus rejects the Ionian ontology because he believes that if one were to accept it, then he would have to make objects that are subject to change play a role that can only be adequately played by objects that are not subject to change. On this interpretation, because of their ontology, the Ionian scientists make the same mistake that Socrates's interlocutors make in the early definitional dialogues. They put forward an example in the place of a definitional answer to the "What is F?" question. Timaeus demands an answer of the form *Τοιοῦτον ὕδωρ ἐστι* ('Such-and-such is water'), but the Ionian scientists try to satisfy him with an ostensive definition. They point to nature and utter sentences such as *Τοῦτο ὕδωρ ἐστι* ('This is water'). To invest the terms *ὕδωρ* ('water'), *πῦρ* ('fire'), etc., with accounts that are "trustworthy and firm" enough to provide for the possibility of knowledge, the Ionians must rely on demonstrative pointings. Timaeus insists that these pointings cannot result in adequate accounts. The problem, according to Timaeus, is that the Ionians point to objects that lack "firmness" (49d7) and are not "steadfast" (e3).

Timaeus maintains that only in terms of a third realm of Forms can there be accounts for the terms *ὕδωρ* ('water'), *πῦρ* ('fire'), etc., that are "trustworthy and firm" enough to provide for the possibility of knowledge. He does not mention the Forms in these two passages, but he tips his hand in 49d3-e7 with his use of *ὅμοιον*. He intends for the relevant Forms to provide the information necessary to fill the *τοιοῦτον*

schema in sentences of the form Τοιοῦτον ὕδωρ ἐστι ('Such-and-such is water') and Τοιοῦτον πῦρ ἐστι ('Such-and-such is fire'). The Ionian ontology, Timaeus argues, is part of a conception of reality that is inconsistent with the possibility of knowledge:

> Is there such a thing as Fire just in itself, or any of the other things which we are always describing in such terms, as things that exist themselves according to themselves (αὐτὰ καθ' αὑτά)? Or are the things we see, or otherwise perceive by the bodily senses, the only things that have such reality, and has nothing else apart from these any sort of being at all? Are we talking idly whenever we say that there is such a thing as an intelligible Form of anything? Is this nothing more than a word (51b7-c5)?
>
> If intelligence (νοῦς) and true opinion (δόξα ἀληθής) are two different kinds, then these things--Forms that we cannot perceive but only think of--certainly exist according to themselves, but, if, as appears to some, true opinion in no way differs from intelligence, then all things we perceive through the bodily senses must be placed as the most established (51d3-7).
>
> Now we must affirm that they are two different things, for they are distinct in origin and unlike in nature. The one is produced in us by teaching, the other by persuasion; the one is always by a true account, the other is without an account; the one cannot be shaken by persuasion, the other can be won over; and true belief, we must allow, is shared by all mankind, intelligence only by the gods and a small number of men (51e1-6).

Timaeus argues that the Forms the fire itself, the water itself, etc., must exist "themselves according to themselves" (αὐτὰ καθ' αὑτά) because with respect to issues involving the four kinds, "intelligence" is distinct from "true belief." Thus, in the *Timaeus*, just as previously in the *Phaedo* and in the *Republic*, Plato argues that the Forms are substances by arguing that only ontologies in which essences are starting-points are part of a conception of reality that is consistent with the possibility of knowledge.

iv. Against Cherniss

Any interpretation of 47e-53c must be judged against alternative possibilities, and there is no shortage of such interpretations. These passages have stubbornly resisted analysis, and a wide diversity of interpretations has an uneasy co-existence in the literature.

Harold Cherniss's influential 1954 paper "A Much Misread Passage of the *Timaeus* (49c7-50b5)" suggests a natural way to divide this literature. In his very thorough critical review of previous translations and interpretations, Cherniss vigorously dissented from the traditional resolution of the ambiguity in 49d-e. Furthermore, he supposed that the passage should be interpreted on the assumption that Plato accepts the Heraclitean doctrine that the sensibles are always flowing in every way and are thus not possible objects of knowledge.

These two aspects of Cherniss's interpretation provide the lines of division. The most general division is with respect to an ambiguity in 49d-e. On this point, scholars are either for the traditional resolution or are for some version of Cherniss's proposal. Within in this division, the alternative interpretations again divide with respect to the Heraclitean flow doctrine. On this point, the alternatives do not divide so neatly. Some scholars reject Cherniss's assumption, but otherwise they do not present a unified front.

Cherniss argues, as I mentioned, that Platonic scholars have typically mistranslated and misunderstood *Timaeus* 49c7-50b5. The crucial phrase in the passage is d5-7. The following is an austere translation of the words in the order in which they occur in the Greek phrase, and without the quotation marks that translators typically add to the text:

> ...not this, but what is such-and-such on each occasion to call fire, nor water this, but what is such-and-such always...

The Greek behind this phrase is ambiguous. The words τοῦτο ('this') and τοιοῦτον ('such-and-such') could either be primary or secondary objects of the verb προσαγορύειν ('to call').

According to the traditional resolution, which Cornford, e.g., reads into his translation in his 1937 book *Plato's Cosmology*, the words

τοῦτο and τοιοῦτον are secondary objects of the verb προσαγορύειν. Cornford thus translates d5-7 as follows:

> ...we should speak of fire, not as "this," but as "what is of such and such of quality," nor of water as "this," but always as "what is such and such a quality"...

Those who accept this resolution suppose that Plato's point, very roughly, is that the untutored have made a category mistake. They have failed to realize that fire, water, etc., are qualities, not stuffs that constitute particular objects.

The other possibility is to take the words τοῦτο and τοιοῦτον as primary objects of the verb. Cherniss adopts this reading. He translates d5-7 as follows:

> ...not to say "this is fire" but "what on any occasion is such and such is fire" nor "this is water" but "what is always such and such is water"...

Cherniss cites many reasons for his reading, but his philosophical reason is that Plato accepted the extreme Heraclitean position about sensibles and the impossibility of knowledge.

Although I did not translate the passage this way, but let the ambiguity come through into the English, I agree with Cherniss that this is the way to resolve the ambiguity. Both readings are possible, but the *Phaedo* and the *Republic* provide the context necessary to indicate the intended assertion. In the light of Plato's previous arguments against the natural scientists and the lovers of spectacles, Timaeus appears to be trying to show his interlocutors that "firm and trustworthy" accounts for the terms ὕδωρ ('water'), πῦρ ('fire'), etc., do not come into existence simply by pointing to nature and uttering sentences such as Τοῦτο ὕδωρ ἐστι ('This is water').

I depart from Cherniss not on his resolution of the ambiguity, but on the radical interpretation he uses to support this resolution. He maintains that Plato intended to convince his readers that portions of the four kinds of stuff "cannot be called anything distinct from anything else." Not appreciating this point, maintains Cherniss, is the

"fundamental mistake" that undermines the interpretation of most previous scholars. He remarks:

> The fundamental mistake made by these and most interpreters, however, is their assumption that Plato must here be saying what name or kind of name the phenomenal "phases," "moments," or "occurrences" should be called, whereas he has already said that these transient moments of flux cannot be called anything distinct from anything else (p. 122).

Cherniss admits that Plato did allow for reference to something sensible in the extension of the nouns πῦρ ('fire'), ὕδωρ ('water'), etc., but he maintains that Plato denied that these references are to portions of stuff:

> The distinctive names, naively and improperly applied to phenomena, denominate in each case "the such and such, whatever the correct formula may be, that is always identical in each of all of its occurrences" (p. 128).

> What are identified by the formula *το τοιοῦτον*... are manifested by coming to be in the receptacle from which again they disappear. Later these distinct and self-identical characteristics that enter and leave the receptacle are called *μιμήματα*... and their nature is said to be that of an image.... They are consequently not ideas (p. 128).

Cherniss supposes that Plato believed that if the nouns to refer, they refer to "self-identical characteristics." Language users can point and utter Τοῦτο ὕδωρ ἐστι ('This is water'), but if they express a truth, they are not talking about some "phenomenal" portion of water. They are talking about some self-identical characteristic.

On Cherniss's interpretation, not only did Plato believe that if such statements are true, they are about self-identical characteristics, he believed that no one can say anything true about a given portion of "phenomenal" stuff. The reason that there can be no true statements about these stuffs is not that they do not exist. Cherniss maintains on Plato's behalf that phenomenal portions of stuff are regions of the Receptacle that are "affected" by the self-identical characteristics:

> On the other hand, <the distinct and self-identical characteristics> are not the same as the transient phenomena either, for phenomena are the apparent alterations of the receptacle as a result of their continual entrance into it and exit from it (50C3-4). Phenomenal fire is the region of the receptacle that has at any moment been affected by fire, phenomenal water the region that has been affected by water, and so according as the *μιμήματα* enter into the receptacle (51B4-6, cf. 52 D4-E1). The intensity and limits of the apparent affections of the receptacle are continually changing and so are indeterminable as fire, water, or anything else (p. 129).
>
> Of the phenomenal flux itself nothing more can be said than that it is the resultant of these entrances and exits in the receptacle (p. 130).

One might well expect Plato to agree that upon seeing, say, the self-identical characteristic water come to be in a given region of the Receptacle, one could point to phenomenal water and truly utter *Τοῦτο ὕδωρ ἐστι* ('This is water'), but Cherniss makes him deny that this is possible. On Cherniss's interpretation, Plato believed that the phenomenal stuffs are in radical flux and that nothing true can be said about what is in such flux.[20]

Several problems stand in the way of Cherniss's interpretation. One problem, which others have noted, is that Timaeus does not distinguish sensible phenomenal stuff and sensible self-identical characteristics in his ontological classifications at 48e2-49a6 and 52a1-b1. In addition to the Forms and the Receptacle, he just mentions sensibles. This oversight would surprising if Cherniss's interpretation were correct. If Plato really believed in these two kinds of sensibles, one would expect Timaeus to list them.[21]

Another problem is that Cherniss's interpretation is so very uncharitable. Plato is content to overlook the tension, if not outright incoherence, in his assertions that the self-identical characteristics are recognizable, that the phenomenal stuffs are regions of the Receptacle that are "affected" by these characteristics, but that language users cannot truly say that a given such region contains a given such stuff. Plato is not worried about this tension, according to Cherniss, because

he is convinced that portions of the four kinds of stuff are in radical flux and that nothing true can be said about them.

Timaeus does say that the phenomena "slip away" and "do not abide" (49e2-4), but this is slim evidence for attributing such a paradoxical view to Plato. In passages from the *Cratylus* and the *Theaetetus* in which he uses similar language (439d8-12; 182d1-7), he is arguing against the Heraclitean proposition that everything is always flowing in every way. In these passages, in the course of arguing against the Heracliteans, Plato does nothing to show that he accepts a restricted version of this doctrine. Indeed, he leaves his readers to conclude, and no doubt intends them to conclude, that no way of restricting the range of its quantifier can save it from absurdity. If, in the *Timaeus*, without any explanation, he were to suppose that the phenomenal stuffs were always flowing in every way, and introduce a new kind of sensible so that language users would have something to talk about, this would come as a complete surprise.

Although Cherniss is correct that Timaeus rejects sentences such as Τοῦτο ὕδωρ ἐστι ('This is water') in favor of sentences such as Τοιοῦτον ὕδωρ ἐστι (Such-and-such is water'), his interpretation is not very plausible because he wrongly accepts a radical interpretation of Aristotle's assertion that Plato was "persuaded by the Heraclitean arguments that all sensibles are always flowing" (*Metaphysics* 1078b13-15). Timaeus does not maintain that the phenomenal stuffs are in radical flux and that the terms ὕδωρ ('water'), etc., have to be predicated of different objects. His assertion, rather, is that simply pointing to a given portion of such stuff cannot provide "trustworthy and firm account<s>" because it cannot provide the appropriate τοιοῦτον (such-and-such). Timaeus's reason is somewhat obscure, but if it is expressed in 49e2-4, as Cherniss seems to believe, then it is that the Ionians wrongly try to point to objects that are subject to change, that "slip away" and "do not abide," in an effort to accomplish a task that cannot be accomplished without the help of the Forms, "beings that are steadfast." It has nothing to do with the radical Heraclitean proposition that Plato rejects in the *Cratylus* and the *Theaetetus*. On this point, Cherniss's interpretation is seriously in error.

v. Against Cornford

Cornford defends an important interpretation on the traditional reading of *Timaeus* 49d5-7, but unfortunately he presents this interpretation in a way that can be confusing. He maintains, at least initially, that Plato believed that before the Demiurge put his hand to the cosmos, language users could not use the word τοῦτο ('this') to demonstrate portions of stuff of the four kinds. At this point in the history of the cosmos, language users can only talk in a way that does not require the existence of objects with a so-called "constant identity." The reason, apparently, is not that their language is impoverished. It contains the nouns that provide for reference to material objects, but before the Demiurge goes to work, the cosmos contains no such objects. In his commentary on 49a-50a, Cornford writes:

> Plato is now asserting that "fire" is properly only a name for a certain combination of qualities or "powers," which appear and disappear and are always varying. Such groups of qualities, though perpetually shifting, are sufficiently alike to be indicated by names; but in referring to fire we ought not strictly to say "this (thing)," because the phrase suggests something which preserves a constant identity ([1937], p. 181).
>
> In contrast with this stream of fluctuating qualities stands that *in which* they make their transient appearances. The Receptacle is the only factor in the bodily that may be called "this," because it has permanent being and its nature does not change. What this Receptacle is, we do not yet know. Later on, when the Demiurge intervenes to introduce an element of rational order, he will form the primary bodies by fashioning for them geometrical shapes. But here we are considering the bodily as it was "before" the Heaven was made. We are not to imagine the qualities here described as existing in particles of any shape, regular or otherwise. There is nothing yet but a flux of shifting qualities, appearing and vanishing in a permanent Receptacle (p. 181; emphasis in original).

Cornford's claim is not self-evident, but he seems suppose that Plato believed that Υδωρ τοιοῦτον ἐστι (Water is a such-and-such), not that Υδωρ τοῦτο ἐστι (Water is a this). Before the Demiurge acts for the best, the only object "in the bodily" is the Receptacle. There were no drops of water, chunks of earth, or other objects with a "constant identity" for language users to talk about.

Cornford seems to rest his interpretation on Timaeus's subsequent assertion about the primordial cosmos and the work of the Demiurge. Cornford says that "<w>e are not to imagine the qualities here described <in 49a-50a> as existing in particles of any shape." This appears to be his gloss on Timaeus's remark that the kinds were first "without reason and measure" (53a8) and "except for possessing some traces of themselves, were altogether in such a condition as is likely when deity is absent" (b2-4). Cornford says that "<l>ater on, when the Demiurge intervenes to introduce an element of rational order, he will form the primary bodies by fashioning for them geometrical shapes." This appears to be his gloss on Timaeus's subsequent remark that the Demiurge intervenes to "dress them in shapes and numbers" (4-5) so that they have "reason and measure."

In view of this commentary on 49a-50a, Cornford appears to maintain that Plato is trying to describe the cosmos before and after the Demiurge acts for the best. After this event, because the Demiurge has made the "primary bodies," there no need for the prohibition against claims such as Υδωρ τοῦτο ἐστι (Water is a this). Before this event, the prohibition is necessary because there are no drops of water or other such objects with a so-called "constant identity."

In fact, however, despite his words, this turns out not to be Cornford's interpretation at all. Contrary to the impression he may give in his remarks on 49a-50a, he supposes that Plato does not really believe in the Demiurge. Cornford supposes that the Demiurge is somehow a "mythical" character in Plato's cosmology. In this way, Cornford opts for an interpretation that sets him with Xenocrates and against Aristotle.[22] He indicates his intention in remarks that occur early in his commentary:

> Though Aristotle chose to criticize Plato's statement in its apparently literal meaning, his colleague Theophrastus recorded the Academic interpretation as at least possible.

> This question is, of course, bound up with the question whether the Demiurge, as such, is mythical. If he was not really a "maker," then there was no moment of creation. We shall presently argue in support of this tradition. For the present we may accept the Academic tradition (p. 26).

These remarks must be keep in mind if one is to understand Cornford's commentary on 49a-50a and on other passages in the *Timaeus*.

In his commentary on 47e-48e, e.g., Cornford appears to assert that the Demiurge creates portions of the four kinds of stuff from certain two-dimensional geometrical shapes:

> The unexplained existence of the four elements had been taken as the *starting-point* for cosmogony, their properties and behavior assumed, "as if men knew what fire and each of the other is." Plato at once denies them the status of elements, and promises to "explain their generation" from prior and simpler beginnings. He intends to construct the geometrical shapes of the four primary bodies from triangles which he takes as elementary (p. 162; emphasis in original).

Since, however, Cornford believes that the Demiurge is in fact a "mythical" figure, these remarks cannot be taken at face value. No merely mythical figure has the power to actually "construct the geometrical shapes of the four primary bodies."

The proper interpretation begins to appear in his commentary on 52d-53c. Cornford maintains, in this commentary, that Timaeus did not intend to assert a literal proposition about some change that the Demiurge caused in the past:

> Such is the chaos taken over by the designing intelligence. How is it to be interpreted? It is now generally agreed that this disorderly condition can never have existed by itself at a time before order was introduced. ... It follows that chaos is, in some sense, an abstraction--a picture of some part of the cosmos, as it exists at all times, with the works of Reason left out, "such a condition as we should expect for anything when deity is absent from it." Now if you abstract Reason and its works from the universe what is left will be

> irrational Soul, a cause of wandering motions, and an unordered element of the bodily, itself moving without plan or measure. This bodily element is represented as consisting of qualities with active powers moving within the Recipient which contains them, not as yet limited by the element of definite quantity, number, measure, shape (p. 203).

With respect to 57c, Cornford maintains that Timaeus puts forward the theory in terms of "shapes and numbers" as an instrumental theory:

> But what is to be made of the picture of plane surfaces being broken up and the fragments drifting about till they find others to combine with? It cannot be taken literally (p. 229).

> Plato's elementary factors are pictured as triangular surfaces, whose regrouping provides for a sudden change from water or air to fire. Such an account seemed to him "likely," as covering phenomena which Democritean atomism could not satisfactorily explain; but he did not mean it to be taken as a literal statement of what "really" happens (p. 230).

These remarks help bring Cornford's real view into focus. He supposes that Timaeus intends to express propositions that are "in some sense, an abstraction--a picture of some part of the cosmos... with the works of Reason left out." Contrary to what one might first think, he does not really maintain that Timaeus denies that chunks, drops, and other such portions of the four kinds of stuff have always existed. Nor does he really maintain that in the past, when he "dressed them in shapes and numbers" (53b4-5), the Demiurge transformed the four kinds from "qualities" into "primary bodies." Cornford's real view is that 49a-50a is part of Plato's attempt to explain how the cosmos would be if "the works of Reason" were "left out."

I am sympathetic to Cornford's suggestion that the theory in terms of "shapes and numbers" is some sort of instrumental theory, since surely Plato did not really believe that portions of the four kinds of stuff are literally constituted by abstract, two-dimensional mathematical entities,[23] but I find no good reason to suppose that Timaeus's point in 49a-50a has anything to do with the theory of changes in terms of

"shapes and numbers" that he later discusses in 53c-57c. The text does not provide sufficient evidence to conclude that Timaeus's point is "in some sense, an abstraction." Timaeus does not explicitly maintain that portions of the four kinds of stuff can be abstracted into two parts. He does not explicitly maintain in 49a-50a that, in abstraction, each has "an unordered element of the bodily, itself without plan or measure." Nor does he explicitly maintain later in 53c-55c that, in abstraction, each has an "element of definite quantity, number, measure, shape." The way that Cornford links these two passages, if this is his intention, has no very clear basis in the text. Timaeus says nothing to suggest that he is trying to accomplish the fantastic goal that Cornford sets for him. He says nothing to suggest that he intends to explain what portions of stuff of the four kinds would be like if one were to "abstract Reason and its works from the universe."[24] His concern in 49a-50a seems to more straightforward. His concern seems to be to argue against the Ionians. He seems to maintain that the stuffs are regions of the Receptacle with certain properties that the relevant Forms specify, and he seems to argue that if the four kinds were starting-points, as the Ionians maintain, then no one could know the kind of a given portion of one of these stuffs.[25]

vi. Against other interpretations

Cornford's translation pre-dates Cherniss's attack on the tradition, but subsequent scholars have come to its defense. Norman Gulley is perhaps the most influential of these scholars. He defends an interpretation on the traditional translation of 49d-e, and his interpretation is significantly different from Cornford's. Cornford maintains that Plato is presenting an "abstraction," but Gulley asserts that Plato proscribes the use of τοῦτο ('this') because he believes that "perpetual change" entails that the cosmos contains no material objects:

> <T>he argument of <49d-e> is, briefly, that since the visible world is one of perpetual change, it is necessary to distinguish between a right and a wrong way of describing it. "This" or "that" (τόδε καὶ τοῦτο) is always wrong, since these terms suggest a reference to something substantial and permanent, whereas in fact the sensible world is a world of

> transient, yet recurrent, qualities or groups of qualities (subsequently called "copies" or "likenesses" of the eternal realities--50C, 51A), which are properly described as "of such and such a kind" (τοιοῦτον). Thus the fact that the visible world is in continual flux does not entail that it is devoid of determinate and recognizable characteristics, but it does entail that there are no substantial and permanent "things" in it ([1960], p. 54).

Gulley sides against Cherniss on the ambiguity in 49d5-7, but he agrees with him that the Heraclitean flow is relevant to the proper interpretation of the passage.

Unlike Cherniss, however, Gulley supposes that Plato shows himself to stand back from earlier assertions in the *Cratylus* and the *Theaetetus* about the implications of the Heraclitean flow doctrine. Gulley supposes that Plato had argued against this Heraclitean doctrine by arguing that whatever is always flowing in every way "is devoid of determinate and recognizable characteristics." By the time of the *Timaeus*, however, Plato changed his mind about the implications of radical flux. Gulley maintains that Plato came to believe that whatever is always flowing in every way can have recognizable characteristics, but cannot be a "thing." He writes:

> <B>oth the *Theaetetus* and the *Cratylus* argue that the fact that the visible world is in continual flux *does* entail that it is devoid of determinate and recognizable characteristics, and make it clear that it is as illegitimate to apply the term "of such and such a kind" to any part of it as it is to apply the terms "this" or "that" (p. 54; emphasis in original).

> <I>n the *Timaeus* Plato is contradicting the assertions of the two other dialogues and is no longer willing to accept what he had earlier propounded and accepted as the implications of the theory that the sensible world is in flux (p. 55).

On Gulley's interpretation, Plato supposes that the sensibles are in radical flux and that this fact requires that many ordinary claims are false. He supposes, e.g., that it requires that fire, water, etc., do not

constitute "things." Plato does not, however, suppose that the flux doctrine entails that the sensible world "is devoid of determinate and recognizable characteristics." In the place of claims such as Υδωρ τοῦτο ἐστι (Water is a this), Plato is now willing to allow claims such as Υδωρ τοιοῦτον ἐστι (Water is a such-and-such).

To show that Plato's readers should expect this change from the *Cratylus* and the *Theaetetus* to the later view in the *Timaeus*, Gulley asserts that Plato came to realize that his views in the middle dialogues are inconsistent. In the *Timaeus*, according to Gulley's interpretation, Plato is trying to bring his various views into line. He continues:

> This is a reflection of the greater consistency of doctrine about the status of sensible "images" of Forms which is found in the later dialogues. A major inconsistency in the middle dialogues is that side by side with a theory which gives the sensible image a fundamental part to play in the recovery of knowledge there is a theory of perception which condemns the sensible world as an aid to knowledge... (p. 55).

In *Timaeus* 49d-e, according to Gulley, Plato publicly corrects an earlier mistake about the implications of flux. He no longer accepts that if the sensibles are in radical flux, then they are "devoid of determinate and recognizable characteristics."

Although perhaps Plato's thought could develop in the way that Gulley supposes, there is not sufficient to show that it actually does develop in this way. Aside from the rather implausible beliefs that he attributes to Plato, and the lack of evidence in the *Timaeus*, the greatest problem for Gulley's interpretation is that there is simply no dialogue in which Plato shows himself to hold that the sensibles are in radical Heraclitean flux. Under the influence of what I believe is a mistaken interpretation of Aristotle, Gulley and many other Platonic scholars have supposed otherwise. The fact of the matter, however, is that Plato simply never shows himself to accept the paradoxical proposition that the ordinary objects are in so much Heraclitean flux that no one can know anything about them. This radical Aristotelian interpretation is fundamentally wrong about the origin of Plato's Theory of Forms, and this fact stands in the way of Gulley's interpretation of the

Timaeus. He has not shown that Plato is recanting past views on "the implications of the theory that the sensible world is in flux" so that he can square his epistemology with his metaphysics.[26]

In his defense of the traditional translation in his 1975 paper "Plato and talk of a World in Flux: *Timaeus* 49a6-50b5," Donald Zeyl wisely steers clear of the Heraclitean flux doctrine. He proposes that Plato discusses the use of the words τοῦτο ('this') and τοιοῦτον ('such-and-such') in an effort to inform his readers that what, e.g., may very well appear as a drop of water, or a chunk of earth, is actually not an "entity in its own right," but rather is "a recurrent *attribute* of something *else*." Zeyl writes:

> <W>hen we refer to a given phenomenon by the term "fire," we must not think that we are referring to what is τοῦτο, but rather what is τὸ τοιοῦτον. ... Because τοῦτο describes a thing as being an entity in its own right, a permanent subject which, while possibly undergoing various modifications, yet retains its identity. And nothing in the phenomenal world is entitled to such status. The description τὸ τοιοῦτον, on the other hand, merely describes its referent as being an attribute of something else. Thus Plato's justification for the reference of "fire," etc., to phenomena is the new logical role that he assigns to those terms: they are to be viewed as picking out a recurrent *attribute* of something *else*. In other words, these terms are to be construed as logically (though not grammatically) *adjectival* (pp. 146-147; emphasis in original).

On Zeyl's interpretation, Plato urges that there are no drops of water, or other objects constituted from the four stuffs, but that what may appear, say, as a drop of water is actually a region of the Receptacle in which a certain characteristic inheres.

Zeyl maintains that Plato urges this "new logical role" because he is worried over the possibility of substantial change and believes that conceptual reforms are necessary so that "we <do not> involve ourselves in absurdities and contradictions." Zeyl writes:

> <O>n the old λόγος, i.e., on the old way of construing our references to phenomena and to the elements *in primis*

> we involve ourselves in absurdities and contradictions, since this λόγος construes the references as *identifying* references. On its terms, when I call the stuff in my pond "water" I do not *predicate* "water" of the stuff I am referring to (as I would if I described it as "cold" or "wet"); rather, I *identify* it as water. And, in the cosmologies of Plato's predecessors, the ultimate bearers of identity references, the ultimate or basic subjects (the linguistic counterpart of their ontological role as basic substrata), were elements. But now, when I, on the terms of this λόγος, *identify* the stuff in my pond as water, what am I going to say when it has turned to air? Shall I now identify it as air? But it is the same stuff! If I do, what happens to my former identification? Am I not forced (at least) to contradict myself? Perhaps I might give it both (or, given the cycle, all four) names. But then how do I distinguish the "water" of my pond from the "air" into which it has evaporated? Maybe Anaximenes was right: it's all air. But why air? What sufficient reason is there to pick one element rather than another? This λόγος, then, is neither reliable nor firm (pp. 128-129; emphasis in original).
>
> Here <in pp. 48 to 52 of the *Timaeus*> Plato wrestles with the perennial problem of permanence through change, trying to identify the *substratum* which underlies even the most basic kind of change, inter-elemental change ([1987], p. 125; emphasis in original).

On Zeyl's interpretation, so that language users will not involve themselves in absurdities, Plato urges them to realize that if they point to nature and utter sentences such as Τοῦτο ὕδωρ ἀέρα γενήσοται ('This water will become air'), the words ὕδωρ ('water') and ἀήρ ('air') have the logical role of adjectives. He urges them to realize that, contrary to the surface grammar, they have asserted that a certain watery portion the Receptacle will subsequently be airy.[27]

Zeyl's interpretation is more likely than the interpretations that I have considered, but it is not without problems. He maintains that Plato is puzzled about how there can be "inter-elemental change" if stuffs of four kinds are starting-points, but Plato gives little or no

indication that he is plagued by this problem. Zeyl maintains that Plato is puzzled because he believed that all change requires that something persists through the change, but if water passes out of existence and air comes into existence in its place, then nothing persists through the change. For this reason, he introduces the Receptacle to be the object that persists through "inter-elemental change." He decided that such change is alteration, not generation or corruption.

If Zeyl were correct, one might expect Timaeus to explain why the use of the language of generation and corruption with respect to the four kinds involves one "in absurdities and contradictions." One might, e.g., expect him to explain that it entails generation from nothing, but Timaeus offers no such explanation. Furthermore, one might expect him to refrain from using this language in contrasting the sensible and intelligible objects. One might expect Timaeus to refrain from explaining to his interlocutors that the sensibles have "birth," "come into being," and "pass out of being," but he shows absolutely no such restraint. He freely uses this language with respect to sensibles in 27d5-28a4, 28b2-c2, 48e2-49a1, and 52a1-7. One might expect Timaeus to refrain from saying that the Receptacle is a necessary condition for the "birth" of all sensibles. Again, however, he shows no such restraint. He uses this language in 49a5-6 and 52b1. If Zeyl were correct, this is not what one should expect.[28]

Another reason to doubt Zeyl's interpretation is that it puts *Timaeus* 48b-51e in a context that breaks an important link to the past. If Zeyl is correct, there is no connection between Timaeus's argument in this passage and Socrates's previous arguments in the autobiography in the *Phaedo* and in book V of the *Republic*. These arguments are against opponents who accept ontologies in which essences are not starting-points, and Timaeus seems to offer roughly the same argument in 48b-51e. This passage clearly begins with Timaeus engaging in a discussion of stuffs of the four kinds and their position in the Ionian ontology, and this is an ontology in which essences are not starting-points. Furthermore, this passage clearly ends with Timaeus and his interlocutors accepting an ontology in which essences are starting-points. Timaeus and his interlocutors agree that the Forms are among the most basic of all existents. Zeyl could be correct that Timaeus rejects the Ionian ontology because he is concerned with "inter-elemental generation." This reading is not incoherent, but I

believe that it is much more likely that, like Socrates before him, Timaeus is primarily concerned with the possibility of knowledge. He is concerned to show that the Ionian cosmology is inconsistent with the possibility of knowledge because it is part of a conception of reality in which essences as not starting-points.

vii. Against Frede

Michael Frede provides a two part explanation for why Plato came to believe that the Forms are "ontologically... prior to the ordinary objects of experience." The first part states that Plato maintains that there are essences. Frede is not concerned to develop this part of his explanation, although his remarks suggest that he supposes that Plato's belief in essences stems from Socrates's search for definitions. Frede's concern is with the more difficult task of explaining why Plato went from believing in essences to supposing that essences are "prior" to the ordinary objects. Frede intends the second part of his explanation to account for this development in Plato's thought. Witness Frede's remarks in the following passages:

> Plato, from some point onwards, came to take the view, that in addition to the ordinary objects of experience, there exist entities of an altogether different kind, ontologically and epistemologically prior to the ordinary objects of experience. There is good reason to think that Plato, in the course of time changed his mind as to the precise nature of these entities and their relation to the objects of experience. But what I am concerned with here is not this further evolution of his view, but rather how Plato came to have it in the first place ([1988], p. 37).

> This is a vexed question, but a first rough answer might come in two parts: (i) Plato assumes that there is such a thing as the essence or the nature of an F, specified by the correct answer to the question 'what is an F?.' Obviously this is a crucial and questionable assumption to make. But I will not consider here the reasons why Plato makes it. Equally obviously, as we can see in Aristotle's case, to make this assumption is not yet to assume that there exists,

> separately from the objects of experience, Platonic ideas. This requires a further step. And it is this further step which the second part of the answer is supposed to explain. (ii) Plato also has a view of the ordinary objects of experience which makes it impossible for him to assume that these natures or essences are somehow to be identified with, or to be found in, the ordinary objects of experience (p. 37).

According to Frede, Plato acquired a "view of the ordinary objects of experience" that explains why he went from believing in essences to supposing that they are "prior" to the ordinary objects. This view made "it impossible for <Plato> to assume" that essences "are somehow to be identified with, or to be found in, the ordinary objects of experience." Since Plato was convinced that essences somehow fit into reality, he concluded that they exist in a way that is "ontologically... prior to the ordinary objects of experience."

The view of the ordinary objects that Frede attributes to Plato is striking. If Frede is correct, Plato believes that the ordinary sensible objects of experience somehow masquerade as something they are not.[29] Frede maintains that Plato shows himself to have this remarkable belief at the outset of the *Timaeus* in 27d5-28a4. To justify this interpretation, Frede first presents a "superficial reading" of this passage that he neither rejects nor wholeheartedly endorses:

> A superficial reading of this difficult text suggests the following view: in characterizing the objects of experience as constituting a realm of becoming Plato characterizes them as being in every respect subject to change. Natures or essences, on the other hand, are not subject to any change; they are not the kind of thing which can change, come into being, or pass away. Hence, if there is nothing about the ordinary objects of experience which is not subject to change, ordinary objects of experience cannot have natures, let alone be natures. Hence, the natures or essences which there are must constitute a separate realm. Now, I don't think that such a superficial understanding of the text is wrong. But I do think that a closer reading will also get us more closely to the heart of the matter (p. 38).

On this superficial reading, Plato leaves his readers to conclude that an ontology that includes the sensibles is not necessarily sufficient to include essences. He leaves them to see that this conclusion follows from two main premises: (i) that "there is nothing about the ordinary objects of experience which is not subject to change," and (ii) that essences "are not subject to any change."

To push "more closely to the heart of the matter" of what he takes to be Plato's deep point in 27d5-28a4, Frede offers a novel interpretation of the meaning of the Greek words ὄν ('being') and γιγνόμενον ('becoming')[30] as they occur in this passage in the following phrase:

> ...τὸ ὂν ἀεί, γένεσιν δὲ οὐκ ἔχον, ... τὸ γιγνόμενον μὲν [ἀεί], ὂν δὲ οὐδέποτε (27d6-28a1).
>
> ...that which always is and does not involving any becoming, ... that which always is becoming, but never is (Frede's translation).

Frede maintains that the superficial reading is superficial because in this passage the word γιγνόμενον cannot mean "coming into being." Frede maintains that Plato uses ὄν and γιγνόμενον in this phrase to mark a distinction between appearing to have the property and having the property:

> I want to suggest that what Plato is saying when he is talking of a realm of becoming in the *Timaeus*... <is> that for any predicate "F" which we attribute to the <ordinary> objects of experience, these objects only temporarily take on and display the character of an F without ever being an F. A real F, by contrast, is one which displays the marks of an F because of the nature it has... (p. 48).

The difference that Frede intends to draw between

"being an F"
and "temporarily tak<ing> on and display<ing> the character of an F"

is, in his words, the difference between

> the nature or character or basic disposition... <and> a temporary disposition, the way something looks, the impression it gives. It is the difference between being pretty or beautiful and looking pretty or beautiful, between being old and acting or looking old (p. 46).

If Frede is correct, Plato had some very eccentric beliefs. He believed that the Form the F itself is really F and that the ordinary objects which are called F are actually only masquerading as F. He believed that the Form is really F because it contains the essence that determines which properties make sensible objects be F. Plato believed that the ordinary objects of experience only masquerade as F. They lack this essence and somehow only have the look, or appearance, of being F.

Frede provides an example that helps to illuminate this distinction between "being" and "becoming" that he tries to read into 27d5-28a4. He says that Plato believed that what one takes to be Socrates, e.g., is such that on closer inspection it only appears to be a man, that the features in virtue of which it appears to be a man turn out on closer inspection to themselves be part of an even more elaborate masquerade, and that "ultimately" there is only "matter which is nothing in its own right and which can only be described metaphorically as part of some randomly shifting chaos." Frede writes:

> Why should we not say that Socrates has such a nature as to have the marks of a human being and hence really is a man? It is not clear what the answer is supposed to be. There seems to be some wavering on Plato's part. But if we come to the *Timaeus* the answer seems to be the following: if we look at Socrates to find what it is that is a man and to see whether it is a man of its own nature, all we find is some material which only temporarily takes on the form of man, and ultimately, if we push the analysis further, some matter which is nothing in its own right and which can only be described metaphorically as part of some randomly shifting chaos. So underlying the marks or looks which the world around us displays there are no natures or essences which

> produce these marks. To put the matter grossly: there is no reality underlying appearances (p. 50).

Frede maintains, if I understand him, that Plato believed that the one essence that determines which properties make objects be men is somehow not "in" the many individual men. This deficiency is apparently how "there is no reality underlying appearances." One can look there for the essence, but it is not there to be found.

Frede does not just maintain that Plato believed that essences are not in the ordinary objects of experience. Frede sets out to explain why Plato came to have this belief. Frede explains that this belief about the ordinary objects stems from Plato's more basic belief that these objects are impostors. Frede maintains that the so-called "language of becoming" shows that because Plato believed that the ordinary objects are "deficient," that they just have "looks," he came to believe that they do not contain essences. This seems to be the claim in the following passages:

> But if this is what Plato means when he assumes that the objects of experience only constitute a realm of becoming, then it seems that this assumption is quite problematic. For, first of all, it involves the assumption that objects of experience do not have a nature or an essence. But this only captures part of what is problematic. For we might be quite ready to grant that ordinary objects do not have natures or essences, that Socrates, for example, does not have a nature such as to display the marks of a human being or a nature such as to display the marks of something just. But we still would not describe the matter in such a way as to suggest that Socrates, in not having the nature of a human being or the nature of a just thing, was missing or lacking something as a result of which he merely, as it were, had the look of a human being or the look of a just thing. But exactly this is suggested, if not implied by the language of becoming, as now understood (p. 49).

> In characterizing the objects of experience as constituting a realm of becoming because they lack natures or essences which could account for their appearance, Plato describes

> them as if they have to be seen as something which is missing something which it should have, which it is pretending to have, which it misleads us into thinking it has, which only has the look of the real thing, which is only an imitation of the real thing, which tries or strives to be like the real thing (cf. *Phaedo* 74d9ff). And looking at the objects of experience in this way we are, of course, pushed in the direction of looking for the real F, of which particular F's only have the look, just as we might be pushed to look for the really good person if we find out that we ourselves at best only have the look of a good person. We certainly have to have at least the notion of a really good person in order to think of ourselves as just at best displaying some of the marks of a good person (pp. 50-51).

> Hence it does seem to me that Plato's assumption of a realm of paradigmatic ideas is not independent of his view of the ordinary objects of experience. His assumption... that the objects of experience lack a nature so as to be anything, properly speaking, they just have a look or appearance of being something and hence have to be understood in terms of, or rather in contrast with, those things which really are something because they have a nature so as to be this way, and not just give the appearance of being this way. Without an adequate understanding of this view about the objects of experience one will not understand why Plato ever came to postulate ideas of the kind he did postulate (p. 52).

On Frede's interpretation, Plato believed that the sensibles masquerade as F, thought that things masquerade as F only if they do not have in them the essence that determines the properties that make objects be F, thought that something masquerades as F only if something really is F, and concluded that this real F is the Form the F itself.[31]

Plato could in principle have this "view of the ordinary objects of experience," but clear evidence would be necessary before one can reasonably attribute this view to any great philosopher. I believe that the *Timaeus* contains no such evidence. Although Frede does not think that his superficial reading of 27d5-28a4 is "wrong," it is certainly not clearly correct. Timaeus never says, at least not explicitly, that the ordinary objects of experience are subject to change in every way. His

aim is to show that the cosmos has a beginning, and to achieve this aim, he distinguishes transitory objects from eternal objects. Frede uses the superficial reading as a stepping stone to a reading in which Timaeus draws an exclusive contrast between "being" and "becoming." On the superficial reading, the ordinary objects of experience are in no way not subject to change. On the more sophisticated reading, these ordinary objects are in "no way being." Frede writes:

> <W>hat seems to be intended <is> a clear and straightforward contrast between being and becoming. Something either is being, in which case it is in no way becoming, or it is becoming, in which case it is in no way being. That this is what Plato has in mind is suggested by later passages in the dialogue (p. 40).

Frede maintains, furthermore, that Plato returns to this contrast "repeatedly" and warns his readers against believing that objects in the so-called "realm of becoming" have "any being whatsoever." Frede writes:

> Plato later in the *Timaeus* repeatedly returns to the contrast between objects in the realm of being and the objects in the realm of becoming. And he warns us against talking of the latter in a way which would suggest that they had any being whatsoever. Thus we are not supposed to talk of them as 'this' or 'that' (*τόδε*, *τοῦτο*, 49e1 and *passim*). In particular, we are not supposed to use the expression 'is' of them. This expression, we are told, is only appropriate for the objects of the realm of being. Thus we are not even supposed to say, properly speaking, of what is becoming that it *is* becoming (37e-38b, esp. 38b1-2) (p. 40; emphasis in original).

I agree that 27d5-28a4 contains an important contrast, but it is not the contrast that Frede claims. The contrast matches eternal and intelligible objects against sensible and transitory objects. The subsequent parallel passages show that the Forms are among the intelligible and eternal objects (48e2-49a1, 52a1-7). These passages also show that the ordinary objects of experience are among the sensible and transitory

objects. The perplexing phrase at 27d6-28a1, which might seem to support Frede's interpretation, does not occur in these subsequent passages. Nor does it occur elsewhere in the corpus, despite the fact that in the *Phaedo* and elsewhere Plato contrasts the Forms with the sensibles. Frede thus seems twice wrong. 27d5-28a4 does not contain the "clear and straightforward contrast between being and becoming" that Frede maintains, and Plato does not "repeatedly" return to this contrast in the subsequent parallel passages.

The other two passages that Frede explicitly cites are equally unconvincing. Frede maintains that by proscribing the use of τοῦτο ('this') in demonstrating ordinary objects of experience, Timaeus is denying that these objects have "any being whatsoever." I do not accept the way that Frede resolves the ambiguity in the Greek, but I agree, if this is Frede's point, that Timaeus is concerned to deny that an ontology restricted to the ordinary objects of experience can provide "trustworthy and firm accounts" for terms that identify the four kinds of stuff. This, however, falls considerably short of showing that Plato has the view of the ordinary objects of experience that Frede attributes to him. It does not show, e.g., that Plato believes that what one takes to be Socrates only masquerades as a man.

In 37e-38b, the other passage that Frede explicitly cites, Timaeus appears equally unconcerned with this view of the ordinary objects. Timaeus's remarks naturally divide into the following two passages:

> For there were no days and nights, months and years, before the firmament came into being, but the demiurge devised their birth at the same time that he put the firmament together. All these parts of time, and the was and the will are forms of time that came into being, which we unthinkingly and wrongly transfer to eternal being. We say that is was is and will, but according to the truth is alone belongs to it, and was and will are only properly used of becoming that proceeds in time. They are motions, but that which always holds in the same way immovably can become neither older nor younger by time, nor can it have come to be in the past, come to be now, or in the future. Nothing belongs to it of all that belongs to the moving things of sense, but these came into being as forms of time, which

> images eternity and revolves according to number (37e1-38a8).
>
> In addition to them still there are these, that which is past is past, that which is happening is happening, and again that which will happen is what will happen, and the non-existent is non-existent, no one of these we say accurately. But this, perhaps, may not be the right moment for a precise discussion of these matters (38a8-b5).

In neither of these passages is Timaeus very clearly concerned with the view that Frede attributes to Plato. Timaeus's concern in the first seems to be with philosophical puzzles that stem from the use of tensed language to talk about objects that exist timelessly. His concern in the second passage seems to be with the puzzles that stem from not properly distinguishing talk about timeless propositions and talk about the dated events that render these propositions true or false. His point in neither passage is straightforward, but Timaeus certainly does not appear to be trying to help his interlocutors to grasp Frede's "clear and straightforward contrast between being and becoming."

Frede may also intend to maintain that *Phaedo* 74d-e supports his interpretation. In this passage, with respect to a given person who sees a given ordinary object, Socrates says that this person thinks to himself that this thing "wishes to be such as some other of the beings" (74d9-10), but is actually "inferior" (e2) to these beings. In the *Timaeus*, Plato has his character make similar remarks. With respect to the basic categories of existence, Timaeus says that the ordinary sensible objects of experience are actually "imitation<s>" (48e6),[32] "image<s>" (52c1), and "semblance<s>" (c3) of the Forms.

These remarks are perhaps suggestive, but they do not provide much in the way of support for Frede's interpretation. Frede needs to show that Plato believed that the ordinary objects of experience are "imitators," that they only have "looks," and therefore do not contain essences, but one need not understand the metaphor of imitation in this way. Frede himself proves this point in his masterful paper on Aristotle's conception of first philosophy. In Aristotle's metaphysical system, if Frede is correct, "lower forms of being somehow *imitate* higher forms of being," but this form of imitation is not that same as

the masquerading that Frede attributes to Plato. In Aristotle, as Frede understands him, the imitating is some other relation. Witness Frede's remarks:

> Aristotle seems to assume not only that ultimately everything depends on God for its being, but also ultimately nothing is intelligible unless it is understood in its dependence on God. And this in various ways. It is not just that everything depends on God as its first cause. There is also the notion, reflected in Aristotle in various ways, that lower forms of being somehow *imitate* higher forms of being. Animals procreate; this is their way of sharing in the eternal. The heaven eternally rotates to *imitate*, as well as it can, the unchanging nature of the unmoved mover. This suggests a scale of perfection in which the less perfect is to be understood in terms of the more perfect and ultimately the unmoved mover, as if everything was like him in the limited way it could be ([1987b], p. 89; emphasis added).

This Aristotelian cosmology is foreign to Plato, but he did believe that the sensibles have to be understood in terms of their dependence on intelligibles. A central tenet in Platonism is that intelligible objects, not sensible objects, are starting-points in reality. Plato believed that the Forms are "ontologically prior" to the ordinary sensible objects of experience, and he uses the metaphor of imitation to help illuminate this dependence.[33] Contrary to Frede's interpretation, however, given that the metaphor need not be so understood, the corpus does not provide sufficient reason to conclude that Plato supposed that masquerading as something they are not is the way that the ordinary sensible objects "imitate" the Forms.

The text is certainly not always easy to understand, but I do not believe that Frede is correct about Plato's reasons for believing that the Forms are "ontologically... prior to the ordinary objects of experience." There is not enough evidence in the *Timaeus*, or elsewhere in the corpus, to show that Plato believed that the ordinary objects of experience masquerade as F and believed that to masquerade as F is not to contain the essence that determines which properties make objects be F. Frede needs clear and compelling evidence to attribute such remarkable beliefs to Plato, and the passages that he cites

fall considerably short of constituting such evidence. They do not come close to showing that Plato believed that the ordinary objects of experience masquerade as Forms, that they have "looks," but do not contain the essences that the Forms contain.

6

CONCLUSION

i. Introductory remarks

Plato, but not Socrates, concluded that the Forms are substances. On this point, there is general agreement. The dispute is over the explanation for this dramatic development in Plato's thought. Although many scholars have offered explanations of the origin of the Theory of Forms, no explanation has seemed clearly correct. I have tried to show that this appearance is not a deception. I have tried to expose the shortcomings in the orthodox explanations and to establish another explanation in their stead. If I have succeeded, philosophers inside and outside the field of Platonic studies will have to abandon much of the received wisdom about Plato.

ii. The received wisdom

Plato has from style among twentieth century philosophers, especially among those in the analytic tradition that stems from Wittgenstein. If these philosophers bother look to Socrates and Plato for inspiration, they look to Socrates. The message is that Socrates was a proto-analyst, a counterpuncher who matched counterexample against false claims to knowledge and who pursued logical analysis and clear thinking about justice, beauty, and other such properties that figured so prominently in the human affairs of fifth century Athens.

The word on Plato is less enthusiastic. He is condemned as a metaphysician, a philosopher who insisted on the truth of propositions that Socrates would have quickly set aside as beyond "human wisdom" (*Apology* 20d8). Plato's contribution to philosophy is summarized in an epitaph. There is no apology. No one explains that he grasped a problem that Socrates missed or was only dimly aware. Plato is dismissed as a metaphysician who believed that there are Forms in a third realm and that the soul first gets knowledge of these objects

before it is incarnated. The student of the history of philosophy is left to conclude either that Plato had no reasons for these beliefs or that his reasons are so strange that they are not worth stating. In either case, Plato takes the blame for a crime that he did not commit.

This epitaph should be regarded as nothing more than a bad caricature, but the lack of credible alternative explanations has turned it into something of a commonplace. Socrates was no metaphysician. This much is true, but the implied reason is false. Contrary to the hopes of some analytic philosophers, Socrates did see that the enterprise is doomed to failure. He did not stand back from the Theory of Forms and the Theory of Recollection because he believed that metaphysical theories are meaningless. Socrates did not consider the philosophical problems that Plato intended these theories to solve, but this fact is rarely emphasized in the secondary literature.

In the twentieth century, no explanation has been the more influential than one that Owen presents in his 1957 paper "A Proof in the Περι Ιδεων." He correctly sees that the clash between the philosopher and the lover of spectacles is a clash between two conceptions of reality, but he matches this insight with a groundless claim. He claims that Plato believes that the Forms are "unambiguous Paradigms" that exist in a νοητὸς τόπος, i.e., that in some "intelligible place" there are instances of justice, beauty, etc., and that these instances function as standards for determining the truth of statements that predicate these properties of the ordinary objects of experience. If Owen is correct, Plato comes to accept this belief about Forms because he insists on extending a certain, rather implausible, semantics for so-called "complete predicates," such as 'is a finger' and 'is a portion of fire,' to cover the sort of predicates that figure in Socrates's "What is F?" question. He believes that the truth of statements that predicate complete predicates are judged against ordinary sensible objects that function as unambiguous standards. For the predicates in Socrates's "What is F?" question, since he cannot find unambiguous standards in the familiar world of ordinary objects of experience, he insists that he has found them in a third realm of Forms.

There have been several attempts to refine Owen's interpretation, but perhaps Irwin's is the most influential. He tries to preserve Owen's insight into book V of the *Republic*, and he tries to make this insight consistent with the Aristotle's explanation of the origin of the Theory

of Forms. Irwin agrees with Owen's claim that the "compression of opposites," not "the succession of opposites," is central to the correct interpretation of the clash between the philosopher and the lover of spectacles, but he sets aside Owen's attempt to make a semantics of complete predicates be the proximate cause of the Theory of Forms. On Irwin's interpretation, Plato falls into a confusion over sensibles. Plato agrees with the Heracliteans that the sensibles are in flux, but fails to see that he agrees only because he believes that the Forms and their opposites are compressed in them. This shortsightedness causes Plato to drastically overstep his premises. It causes him to draw the metaphysical conclusion that the Forms exist separately from sensible objects. From the premise that justice, beauty, etc., are not definable in terms of sensible properties, Plato invalidly concludes that these Forms exist separately and as substances. On Irwin's interpretation, the Theory of Forms stems from a straightforward blunder.

In view of these and other such explanations of the development of his thought, no one should be too surprised that Plato has fallen from style among the majority of twentieth century philosophers. Plato and his Theory of Forms appear to have little or nothing going for them. The theory seems to stem from simpleminded confusions or extremely implausible beliefs. It seems to be an embarrassment that Aristotle and subsequent more sober-minded philosophers quickly and correctly abandoned. This is the import of the leading explanations of the development of Plato's thought.

iii. The development of Plato's thought

I have tried to say more for Plato and his theory. To establish my explanation of the development of his thought, I have tried to clear away certain orthodox interpretations and to put others in their place. This first was Vlastos's interpretation of Socrates's autobiography in the *Phaedo*. Vlastos wrongly turns this passage into an anticipation of Aristotle's Doctrine of the Four Causes, and he thereby falsifies Plato's reasons for concluding that the Forms are substances. The Theory of Forms is part of a stream of thought that includes the cosmological speculations of the early Milesian natural scientists, Parmenides's dramatic attempt to establish an alternative road to knowledge, and Socrates's insistence on the priority of definition and the priority of

Form in his search for knowledge about matters involving justice, beauty, and other such properties. Plato takes Socrates's practice to constitute a clean break from the practices of the natural scientists. Contrary to Vlastos's interpretation, he does not try to make room for both methodologies. He sees these different ways of searching for knowledge as alternatives, and he decides that Socrates's method is the "philosophical," or scientific, way to search for knowledge.

In addition to deciding in favor of Socrates and against the natural scientists, Plato shows himself to grasp a point that his mentor failed to grasp. He realized that to justify Socrates's new method of intellectual inquiry, he must fit its two leading assumptions into a general conception of reality. Socrates supposed that the possibility of knowledge about matters involving justice, etc., presupposes the possibility of definitional knowledge of these properties. He supposed that these definitional truths somehow have their source in Forms, but he did not try to justify his assumptions. He did consider how Forms fit into reality. Plato did. He struggled with this philosophical problem, and he concluded that the Forms exist as substances.

Book V of the *Republic* is the other place in the middle dialogues that Plato argues that the Forms exist as substances, but to appreciate the full import of this passage, one must reject Owen's interpretation and its descendants in the work of Vlastos, Irwin, and other scholars. The sophists are the other intellectuals in Plato's past, and they are his enemy in the *Republic*. Plato agreed with Socrates that if there can be political knowledge and expertise, justice must have an essence. Plato also supposed that the sophists, especially the younger generation of sophists, advocate a conception of reality according to which there is no ground for this formal truth about justice. He thought that on a conception of reality according to which essences are not starting-points, but rather must find their place among of "the many conventions (*νόμμα*) of the many," there would be no real distinction between knowledge and true belief. He thought that on such a conception of reality, instead of one objective definitional truth that has its source in a Form that exists "itself according to itself" (*αὐτὸ καθ'αὐτό*), there would be many subjective, mutually inconsistent "fancies," or "opinions," that masquerade as this definitional truth. To avoid this consequence, and to insure that the *πόλις* need not appear both just and not-just, the philosopher recognizes the truth of the

Platonic conception of reality. He insists that the Forms are substances. Plato thought that only on such a conception of reality could there really be political knowledge and expertise.

iv. Aristotle on Plato

One should expect Aristotle to confirm my explanation, but many scholars read Aristotle in a way that is inconsistent with it. They take him to argue that the Theory of Forms is part of a reactionary backlash to the Milesian tradition. These scholars suppose that Plato concluded that the Forms are substances because he accepted paradoxical Heraclitean claims that few have ever accepted and that were on the intellectual fringe in the ancient world. In contrast to the Milesian optimism about the possibility of knowledge about the nature of the cosmos, Cratylus and the extreme Heracliteans were much more pessimistic. They maintained that knowledge is impossible because everything is caught up in radical flux. Cratylus even went further. He "did not think it right to say anything but only moved his finger" (*Metaphysics* 1010a12-13). Many scholars maintain that the views of Cratylus and Socrates come together in Plato to issue in the Theory of Forms. They understand Aristotle to explain that Plato accepted this extreme Heraclitean doctrine about sensibles, and that because he accepted from Socrates that knowledge was possible, he concluded that there are unchangeable Forms in a third realm.

This interpretation should have always seemed impossible. With respect to the sensibles, Plato is not always as clear as his readers might hope, but he is clear enough to cast doubt over this explanation of the origin of the Theory of Forms. It gives Plato a belief in a clearly false proposition, and the corpus provides no reason to suppose that he was so shortsighted that he did not recognize it as such. Not only does Plato never claim this proposition for himself, it is inconsistent with some of his central and most well known philosophical positions. If Plato denied that knowledge about the sensible world is possible, he would have no reason to argue, as he does at length in the *Republic*, that only the philosopher is fit to rule because only he accepts a conception of reality according to which political knowledge and expertise is possible. Only the philosopher recognizes that the true politician looks "back and forth, to justice,

beauty, temperance, and all such things as by nature exist, and composes human life with reference to these..." (501b1-4).

Irwin recognized that an alternative reading of Aristotle's account is necessary, and his interpretation has taken on the air of orthodoxy. According to Irwin's interpretation, Plato does not succumb to the twin evils of radical flux and skepticism about the ordinary objects of experience. Irwin maintains that, in accepting the Heraclitean claim that the sensibles are flowing, Plato holds the plausible view that sensible properties are flowing because opposites moral properties are compressed in them, not the implausible view that the sensible particulars are always changing in every way. In this way, with his novel interpretation of Plato's understanding of the flux doctrine, Irwin tries to unite the best of Owen's interpretation with Aristotle's testimony that the influence of Socrates and the Heracliteans came together in Plato and gave birth to the Theory of Forms.

I have argued that there is a better way to understand Plato and Aristotle. Irwin is correct to see that Plato did not fall prey to the twin evils of radical flux and skepticism, but he is wrong to make the Theory of Forms stem from a simple confusion about sensibles. The *Phaedo* and the *Republic* suggest that Plato concluded that the Forms are substances, not because he conflated sensible objects and sensible properties, but because he came to believe no other ontology is part of a conception of reality that is consistent with the possibility of knowledge. Aristotle's remarks can be understood in a way that confirms this reading of the dialogues, and I have argued that this is how they should be understood. In the autobiography in the *Phaedo*, in addition to rejecting the natural scientists's method of inquiry in favor of the method that Socrates pursues in his search for knowledge, Plato concludes that the Forms exist as substances and ontological starting-points. Plato's reasoning is not as clear as one might hope, but Aristotle's remarks help bring it into clearer focus. The natural scientists make certain sensible objects, such as portions of water, fire, etc., be ontological starting-points in their cosmologies. Aristotle's remarks suggest that Plato believed that Socrates's method of inquiry could not be part of this conception of reality. Aristotle's remarks suggests that Plato believed that because sensible objects are "flowing," they can provide no stable foothold for the existence of the essences that are a necessary condition for the possibility of knowledge.

According to Aristotle, this is way Plato concluded that the Forms are separate and exist as substances.

v. Illuminating a perplexing passage

My interpretation can stand on Socrates's autobiography in the *Phaedo* and on the discussion of the philosopher in book V of the *Republic*, but it has explanatory power that reaches far beyond these important passages from the middle dialogues. It also helps to illuminate a difficult and much debated section of the *Timaeus* in which Plato sets himself against the Ionian cosmologists.

The background assumptions that many scholars have brought to bear on this passage have forced their interpretations to go astray. Cherniss, e.g., assumed that Plato accepts the extreme Heraclitean doctrine that the sensibles are in radical flux and that there can be no knowledge with respect to these objects. Others have made similar assumptions. Gulley, e.g., assumed that although in previous dialogues Plato accepted this Heraclitean doctrine, he now accepts a qualified version. Neither scholar, however, is correct. Indeed, this whole approach is wrong. It is predicated on a mistaken interpretation of Aristotle's explanation of the origin of the Theory of Forms.

Once this mistaken interpretation is set aside, and the reader recalls Socrates's previous encounters in the *Phaedo* and the *Republic* with the natural scientists and with the lovers of spectacles, the proper interpretation of this passage from the *Timaeus* begins to come into focus. In these previous dialogues, Socrates's opponents advocate a conception of reality in which essences do not exist as ontological starting-points. The lover of spectacles, e.g., tries to put the many *νόμιμα* in the place the one Form that exists *αὐτὸ καθ' αὑτό*. Timaeus faces the same sort of opponent in the Ionian cosmologists. The Ionian scientists do not recognize the truth of the Platonic conception of reality. They fail to see that only "intelligible" (*νοητός*) objects are fit to be starting-points. The starting-points in their ontology are "sensible" (*αἰσθητός*) objects. They are portions of stuff of the four kinds that are traditional in Greek cosmology.

Timaeus argues against this ancient orthodoxy. Like Socrates in the *Phaedo* and the *Republic*, Timaeus argues that the natural scientists

accept a conception of reality that is inconsistent with the possibility of knowledge. Timaeus maintains that the Ionians cannot invest the terms πῦρ ('fire'), ὕδωρ ('water'), etc., with λόγοι that are "trustworthy and firm" enough to provide for the possibility of knowledge about matters involving these stuffs. Timaeus supposes that the Ionians are constrained to give inadequate replies to the "What is F?" question. He supposes that, in virtue of their ontology, they must point and utter sentences such as Τοῦτο πῦρ ἐστι ('This is fire') and Τοῦτο ὕδωρ ἐστι ('This is water'), and he rejects such responses as inadequate. Timaeus insists on responses of the form Τοιοῦτον ὕδωρ ἐστι ('Such-and-such is water') and Τοιοῦτον πῦρ ἐστι ('Such-and-such is fire') because only Forms can provide the information necessary to fill the τοιοῦτον schemata in a way that knowledge is really possible. About matters involving fire, water, etc., Timaeus believes that there are truths to know. He rejects the Ionian ontology as inconsistent with this fact. Timaeus maintains that it is part of a conception of reality according to which there is no ground for a distinction between knowledge and true belief. He maintains that on the Ionian conception of reality, there can be nothing more than fancies and opinions. To avoid this unpalatable consequence, like Socrates before him, Timaeus recognizes the truth of the Platonic conception of reality. He recognizes that the Forms exist in reality as substances and ontological starting-points.

vi. Plato's conception of reality

The Platonic conception of reality has little support among twentieth century philosophers, but I hope that I have shown that the difference of opinion is over substantive metaphysical and epistemological issues. The Theory of Forms does not have its origin in a simpleminded mistake. It is Plato's solution to a real problem. Socrates started a revolution. He introduced a new "method" (μέθοδος = μετά + οδός) of intellectual inquiry. Socrates turned his back on the practices of his predecessors and decided to follow a new "way" (οδός) of inquiry "in the pursuit of" (μετά) knowledge. Plato applauded him for his decision, but he also realized something that Socrates was perhaps only dimly aware, and may not have recognized at all. Plato realized that the "philosopher" (φιλόσοφος) could have complete confidence in this new method of inquiry only if he could understand how it fit into a

general conception of reality. The Theory of Forms was born in this realization. It is the direct result of Plato's attempt to validate the leading assumptions in the method of intellectual inquiry that Socrates uses in his pursuit of knowledge. Plato agreed with Socrates on the priority of definitions, and he came to believe that this fact has significant and far reaching implications for how reality must be. Plato thought that reality must contain Forms if there are to be definitional truths, and because he was unsatisfied with the alternative ὀntologies that he associated with the natural scientists and the sophists, he concluded that the Forms must exist in reality as substances and ontological starting-points. He thought that reality could be no other way if knowledge and expertise, including political knowledge and expertise, were to be possible at all. This is why Plato concluded that the Forms are substances.

NOTES

Chapter 1

1. 'Form' and 'substance' are technical terms. 'Form' takes its meaning as a translation of the Greek nouns εἶδος and ἰδέα as these words occur both in the context of the search for definitions and in the context of the more theoretical discussions in the middle and late dialogues. (Εἶδος and ἰδέα come from a root in the verb εἴδω. This verb means "to see." In ordinary contexts, the nouns often mean "shape" or "figure.") 'Substance' takes its meaning as translation of the noun οὐσία as it occurs in philosophical contexts in Plato and Aristotle. (Οὐσία comes from a participle of the verb εἰμί, which means "to be." In ordinary contexts, οὐσία often means "that which is one's own," "property," or "estate.") In his classic 1911 edition of the *Phaedo*, John Burnet speculates that the Pythagoreans first pressed the word οὐσία to serve as a technical term and that Plato took his use from these philosophers (p. 34). Burnet's evidence, however, is rather thin. For criticism, see Ross [1924], pp. xxxiii-xlviii, and Grube [1935], pp. 291-294.

2. Miles Burnyeat notes that explaining why Plato concluded that the Forms are substances is one of the most difficult and important tasks in Platonic scholarship. "<Plato> demands an Equal that is not relative, a Beauty that is not transitory and comparative... and he locates them in a higher realm of transcendent Forms. Here is the true beginning of the great metaphysical vision. But what is its justification? ... To my mind this is the hardest and most pressing question about Platonism, which surprisingly few scholars try to answer" ([1979], p. 57).

3. I assume, furthermore, that the Platonic corpus is a relatively straightforward indication of Plato's thoughts. Although it is not universal, this assumption is commonplace among contemporary scholars. Witness, e.g., Richard Kraut's remarks in his introduction to *The Cambridge Companion to Plato*. "Our best chance of understanding Plato is to begin with the assumption that in each dialogue he uses his principal interlocutor to support or oppose certain conclusions by means of certain arguments because he, Plato, supports or opposes those conclusions for those reasons. This methodological principle is not an a priori assumption about how Plato must be read, but is rather a successful working hypothesis suggested by an intelligent reading of the text and confirmed by its fruitfulness. Reading Plato in this way allows us to make use of whatever material we have in the

dialogues to contribute to our understanding of them.... The fundamental idea is that unless we have good evidence to the contrary, we should take Plato to be using the content of his interlocutors' speeches, the circumstances of their meeting, and whatever other material he has at his disposal, to state conclusions he believes for reasons he accepts" ([1992], pp. 29-30). For further helpful advice about how to pursue the history of philosophy, see Frede [1987a].

4. 'Essence' is the usual English translation of the phrase τί ἦν εἶναι as it occurs in philosophical contexts in Aristotle. He uses the phrase to designate what is articulated by a definition. Given its prominence in the *Topics*, this phrase and its technical use may have its origin in Plato's Academy.

5. I believe that this principle is Socratic in origin, and is not a Platonic invention, but nothing in my argument turns on this issue. For an extensive recent discussion of the "priority of definition" in the early dialogues, see Benson [1990].

6. I believe, as I have stated, that Socrates had no ontological theory about the Forms, but my argument only requires the weaker claim that Socrates did not believe that the Forms are substances.

7. On the historical Socrates, I agree with the orthodox view that Kraut sets out in his introduction to *The Cambridge Companion to Plato*. "The most plausible answer, one that is now widely accepted by many scholars, is this: In the *Apology* and in several other works that search for ethical definitions but show no deep interest in mathematics and make no inquiry into metaphysics, we have a portrait of the historical Socrates; but then, as Plato continued to develop in his thinking, he retained Socrates as the main interlocutor of his dialogues, even though the doctrines of this more ambitious 'Socrates' go well beyond anything dreamt of by that philosopher. And this interpretation of Plato's development accords with the distinction Aristotle makes between the real Socrates and the Socrates who is a mouth piece for Plato; the former, he says, professed ignorance and inquired about ethical matters but not 'the whole of nature' <*Metaphysics* 987b2>; to the latter he attributes no such limitations, but instead regards him as a thinker who speculated about a wide range of issues and fell into utter confusion when he posited a realm of separately existing Forms and the Form of the Good central to ethical theory" ([1992a], p. 4).

8. Bertrand Russell uses similar language to describe the realist position. "Having now seen that there must be such entities as universals, the next point to be proved is that their being is not merely mental. By this is meant that whatever being belongs to them is independent of their being thought of or in any way apprehended by minds" ([1912], p. 97). After giving the proof, he concludes that "we must admit that... <universals belong> to the independent world which thought apprehends but does not create" (p. 98).

9. For other ways of describing this development in Plato's thought, witness the following remarks. "If we now ask, 'What is a Platonic Form?', the first thing to say is that the notion of a Form is the notion of that which a definition defines (cf *Phaedo* 75cd). Hence 'X itself' does often import a reference to a Form. But the mere identification of something which a definition defines is not enough to constitute a *theory* of Forms. It is one thing to set out to define justice, quite another to say that justice as such exists on its own, separately from just men and just actions. We cannot properly speak of the Platonic Theory of Forms until this has been said. In dialogues like the *Phaedo* and *Republic*, which propound the Theory of Forms as a theory about the epistemological and ontological presuppositions of the Socratic method of definitional inquiry, the Forms are transcendent natures, existing independently of the empirical world, unchanging and divine, to be grasped only by reflective reasoning. In other dialogues, however, especially the early Socratic dialogues, 'X itself' is contrasted with its particular instances and definitions are sought, without any of this high-powered theoretical background" (Burnyeat [1990], p. 38; emphasis in original). "In the so-called Socratic dialogues concerned with definition, and specifically with the *Euthyphro* and *Meno*, Plato introduces the notion of a form (εἶδος, ἰδέα) as the objective correlative of these objects. The theory of the middle dialogues provides the characteristically Platonic ontology, where the Forms are described as unique, eternal, immune from change, without bodily or spatial location, and accessible only to the intellect, not to the senses. The *Symposium* announces this ontological theory for the first time, with reference to a single Form of Beauty. The *Phaedo* then states the theory generally, for all Forms; and the *Republic* applies this doctrine to a whole range of problems in epistemology, political theory, and education" (Kahn [1973], p. 154). "Socrates said that you cannot discuss moral questions like how to act justly, or aesthetic questions like whether a thing is beautiful, unless you have previously decided what you mean by the concepts 'justice' and 'beauty.' (This we know from Xenophon and Aristotle no less than Plato.) Until these are fixed, so that we

have a standard in our minds to which the individual actions or objects may be referred, we shall not know what we are talking about, and discussion may be frustrated because the parties are attaching different meanings to the same words. If this is right, Plato said, then we must believe that such a thing as justice or beauty really exists, for otherwise what is the use of trying to define it? It is no good looking for a universal standard if it is only imaginary. He taught therefore the existence of a 'Form' or 'Idea' (in Greek εἶδος or ἰδέα) of these and other concepts, which was not a *mere* concept existing in our minds but had an eternal and unchanging nature independent of what human beings might think it was. This is the famous χωρισμός, or affirmation of the *separate* existence of the Ideas--separate, that is, both from the particular instances of them in the world and from our thought of them; and belief in such independently existing Forms constitutes what is known as 'Plato's Theory of Ideas'" (Guthrie [1969], pp. 352-353; emphasis in original).

10. Martin West makes the same point. "We run <the pre-Socratics> together as 'philosophers,' but they had no generic name for themselves. Philosophy is of course a Greek word--it meant originally something like 'devotion to uncommon knowledge'--but it did not acquire a specialized sense or wide currency until the time of Plato" ([1988], p. 127).

11. Heraclitus seems to use the word in this way. He says that "men who love wisdom (φιλοσόφους ἄνδρας) must be good inquirers (ἵστορας) into many things" (DK 22 B 35). Diogenes Laertius reports that Pythagoras was the first to call himself a φιλόσοφος (*Lives of the Philosophers* I.12).

12. Charles Kahn provides a clear explanation of the etymology of the use of the noun ἱστορία. "As we can see from other early samples, Greek prose was at first employed primarily for the publication of Ionian ἱστορίη: for presenting the results for systematic 'inquiry' or 'research' on a variety of subjects from astronomy to biology, including historical research in connection with the description of lands and people (as in the travel book of Hecataeus, a Milesian contemporary of Heraclitus). The old Ionic term ἱστορίη soon became fixed in its narrow application to 'history' in our sense, because it was this type of investigation that first gave birth to major works of prose literature: the *Histories* of Herodotus and Thucydides" ([1979], p. 96). The use of the term ἱστορία for systematic inquiry is preserved in the English term 'natural history.' This linguistic fact is at least in part due to Aristotle's long dominant influence in the practice and philosophy of science. The title of one of his books on animals is Τῶν περὶ τὰ ζῷα ἱστοριῶν ('*On the History of Animals*').

13. The phrase *περὶ φύσεως ἱστορίαν* occurs in the *Phaedo* at 96a8. In his Clarendon Plato Series edition, David Gallop uses 'natural science' in his translation ([1975]). In his edition of the *Phaedo*, Burnet says "that it is the oldest name for what we call 'natural science'" ([1911], p. 99).

14. Unless otherwise noted, all references to the Platonic Corpus are to Burnet's *Platonis Opera*.

15. As Vlastos has correctly noted, Socrates's autobiography "is one of the great turning-points in European natural philosophy..." ([1969], p. 297).

16. This, in part, explains why Aristotle makes the science of physics be "second philosophy." The full explanation is quite involved, but Plato's demotion of the natural scientists from the rank of philosopher is a crucial historical antecedent for Aristotle's position. For a helpful discussion of Aristotle's conception of "first philosophy," see Frede [1987b].

17. Guthrie may have a similar point in mind. "<The Theory of Forms> was seen by later philosophers, from his immediate pupil Aristotle onwards, to constitute a new conception of reality, and further reflection, and discussion with his colleagues in the Academy, revealed serious difficulties in it to Plato himself. Yet in his own mind, I am sure, it would seem to constitute no more than the obvious and only possible defense of Socrates's teaching, and to do no more than bring its implications into the open. 'Before you can know that a thing is beautiful, you must be able to say what beauty is.' It could not have been long before someone raised the pertinent question: 'Yes, Socrates, but are you asking us to define what is real or not? For, if beauty, justice and such are only creations of our imaginations, surely you are wasting our time.' By trying to answer this question in a sense favorable to Socrates rather than to Gorgias, how could Plato have thought he was acting otherwise than from motives of piety..." ([1969], p. 353). Guthrie describes Socrates's debate with Gorgias and the sophists in subsequent remarks. "One feature in the thought and speech of his contemporaries seemed to Socrates particularly harmful. Whether in conversation, in political speeches or in the oratory of the law-courts, they made constant use of a great variety of general terms, especially descriptive ethical ideas--justice, temperance, courage, *ἀρετή* and so forth. Yet at the same time it was being asserted by Sophists and others that such concepts had no basis in reality. They were not god-given virtues, but only 'by convention,' varying from place to place and age to age. ... From this theoretical soil grew the pride of youthful rhetoric in its ability to sway men to or from any course of action by mastery of the persuasive use of

words. In such an atmosphere it was not surprising that there was much confusion in the meanings attached to moral terms. Socrates noted this, and disapproved of it. If these terms correspond to any reality at all, he thought, then one meaning must be true and the others false. If on the other hand the Sophists were right, and their content was purely relative and shifting, it must be wrong to go on using the same words for different things and they ought to go out of use. He himself was convinced that the first alternative was true, and that it was illegitimate and unhelpful for an orator to exhort the people to adopt a certain course of action as being the wisest or most just, or for advocates and jury to debate whether an individual had acted well or badly, justly or unjustly, unless those concerned were agreed upon what wisdom, justice and goodness *are*. If people are not agreed on that, but though using the same words mean different things by them, they will be talking at cross-purposes, and their discussions can make no progress either intellectually or--when ethical terms are in question--morally. Here Socrates was raising for the first time a fundamental question of philosophy, the question by what right we use general terms, including all nouns except proper names, and what is the factual content of such terms, and Aristotle was right to see that this was so. At the same time, as Aristotle also recognized, he did not see it as a logical or ontological question, but simply as an indispensable requirement for what to him was much more important: the discovery of the right way to live" (pp. 431-432; emphasis in original).

18. Owen, Vlastos, and other scholars in the Oxford tradition have dominated Platonic scholarship in the United States in recent years. Nicholas White puts this point clearly. "The philosophical study of Plato during the last half-century has been dominated by a conception of it that arose mainly in Oxford before World War II and then spread to this country. The conception has been represented by figures like Gilbert Ryle, Richard Robinson, G. E. L. Owen, and Gregory Vlastos. The set of problems established then continues to resist most attempts at revision" ([1991], p. 318). These scholars approach Plato from within the analytical tradition. This can cause misreadings. Vlastos's interpretation of the *Phaedo* illustrates this point. He tries to see Plato as using one of the techniques that is part of the stock-in-trade of analytical philosophy. Vlastos tries to see Plato as solving philosophical problems by using the Rylean technique of exposing unapparent senses of words. This analytic approach also brings an anti-metaphysical basis that can make dismissive readings too easy to accept. White, again, puts the point clearly. "<M>ost work on ancient metaphysics in the last few decades

has been too anti-Platonic to articulate effectively what drives Plato's thinking" (p. 320).

19. I accept the traditional view that the *Timaeus* is among Plato's latest dialogues, that it comes after the *Theaetetus*, and that *Theaetetus* comes after the *Parmenides*. See, e.g., Ross [1953], p. 10. The traditional view comes under attack in Owen [1953]. For criticism of Owen's argument, and a vigorous defense of the traditional dating, see Cherniss [1957]. See also Prior [1985], pp. 168-193 and Fine [1988], pp. 374-383. For a helpful discussion of the methods for dating Plato's dialogues, and the various orderings that result, see Brandwood [1990].

20. Some twentieth century philosophers do accept Plato's most general claims about knowledge and reality. See, e.g., Nagel [1986], chapter V.

Chapter 2

1. Although the position has little or no support among contemporary scholars, in the past some scholars have argued that the Theory of Forms, as it is presented in the middle dialogues, was invented by the Pythagoreans, held by the historical Socrates, and popularized by Plato. See, e.g., Burnet [1911], pp. xliii-xlviii and [1930], pp. 308-309. For criticism of Burnet's argument, see Ross [1924], pp. xxxiii-xlviii and Grube [1935], pp. 291-294.

2. Socrates's intellectual autobiography is one of the most controversial and most discussed passages in the Platonic corpus. For some of the many recent discussions, see Taylor [1969], Vlastos [1969], Burge [1971], Cresswell [1971], Stough [1976], and Annas [1982].

3. Another part of Socrates's method is the elenchus. For some discussion, see part of I of Richard Robinson's *Plato's Earlier Dialectic*.

4. Some scholars have found Socrates's insistence on the priority of definitional knowledge to be puzzling, even wrongheaded, and some have charged him with committing a fallacy. Peter Geach, e.g., takes Socrates to claim "that if you know you are correctly predicating a given term 'T' you must 'know what it is to be T,' in the sense of being able to give a general criterion of a thing's being T" ([1966], p. 371). He maintains that this claim is "*the Socratic fallacy*, for its *locus classicus* is the Socratic dialogues" (p. 371; emphasis in original). For helpful discussion of the textual evidence in the various pre-*Phaedo* dialogues, see Beversluis [1974], [1987], Burnyeat [1977], Nehamas [1987], and Santas [1972].

5. In translating passages from the Platonic corpus, I stay close to standard and easily accessible translations. In translating passages from the *Republic*, I follow Grube's translation ([1974]). In translating passages from the *Phaedo*, I follow Gallop's translation ([1975]). Unless otherwise indicated, I follow the translations in Hamilton [1961].

6. Although the *Hippias Major* was accepted in antiquity as a Platonic dialogue, some scholars now debate its authenticity. I accept the dialogue as genuine. I agree with John Malcolm and Paul Woodruff that the *Hippias Major* is a transitional dialogue which falls between the *Euthyphro* and the *Phaedo* (Malcolm [1968], pp. 189-190; Woodruff [1982], p. 93). For an argument that the *Hippias Major* is not a Platonic dialogue, see Kahn [1985].

7. See, e.g., *Lysis* 223b4-8, *Charmides* 176a6-8, *Euthyphro* 6e2-6, *Protagoras* 360e7-361a3, and *Meno* 71a3-8, 80a4-b5.

8. For the use of the instrumental dative in Greek, see Smyth [1956], sections 1503-1520. Burnet puts the correct sort of philosophical gloss on Socrates's use of this locution in connection with the search for definitions. "The instrumental dative is regularly used of the 'form' to express the fact that the universal makes the particulars what they are" ([1924], pp. 36-37). Russell uses 'in virtue of which' in the following passage to make the same point. "If we ask ourselves what justice is, it is natural to proceed by considering this, that, and the other just act, with a view to discovering what they have in common. They must all, in some sense, partake of a common nature, which will be found in what is just and in nothing else. This common nature, in virtue of which they are all just, will be justice itself, the pure essence the admixture of which with facts of ordinary life produces the multiplicity of just acts" ([1912], pp. 91-92).

9. In his discussion of the Theory of Forms, Ross suggests that the *Euthyphro* contains Plato's first uses of (Greek counterparts of) the terms 'Form' and 'Idea' for the objects of Socrates's "What is F?" question. "It seems probable that the *Euthyphro* is the first dialogue in which either of the words ἰδέα and εἶδος appears, in its special Platonic sense; and both appear there. The passages are <5d1-5 and 6d9-e6>" ([1953], pp. 12-13).

10. Despite Socrates's insistence on the priority of Form, the *Hippias Major* does not provide enough evidence to conclude that Plato believes that the Forms are substances. Woodruff makes a similar claim. "Ontology is peculiar to philosophers, and to philosophers of a certain stamp. To construe ontology more broadly would be to trivialize the question of whether Socrates leaned in that direction. Those who would enlarge ontology to cover every question about what there is would make ontologists of us all, and thus blur the history of philosophy. I must therefore dismiss as irrelevant the considerable evidence at *Hippias Major* 287cd that commits Socrates to the *existence* of things like justice and fine. Such commitments have nothing to do with ontology and are not controversial. Any discussion presupposes the existence of the subjects it discusses; but few discussions commit themselves to an ontological theory about their subjects. Most people who talk of forestry have not doubt that trees exist, but at the same time have not the inkling of an ontological theory about them: in talking of trees they do not adopt an ontology of physical objects continuous in space and time. Commitments to existence are not commitments to specific ontological theories" ([1982], pp. 163-164; emphasis in original). "This I take to be the point of Quine's doctrine of ontological relativity. Until talk of trees is interpreted against a

background of theory, it is not committed to any specific ontology" (n. 7 on p. 179).

11. R. E. Allen argues that Socrates has an ontological theory, but Allen seems not properly to distinguish between the relatively innocent proposition that essences are necessary for knowledge and the more metaphysically menacing proposition about how essences exist. "Now, what does all this imply? It seems to imply something which is properly called a theory of Forms. That theory is, in the first place, a technical theory, a body of rules governing the practice of a useful art, that of dialectic. Thus, the question, 'What is holiness?' cannot be answered by examples, <but>... must be answered by an analysis of the essence of holiness, because holiness is a Form. So it is a technical theory--a logical theory, if you will, in some sense of that much used and abused term. But it is also a metaphysical theory. It assumes the existence of Forms, as universals, standards, and essences. That assumption is stated or implied throughout the early dialogues. It is to be remembered that one mark of being is power. As essences, Forms do not, so to speak, just sit there. They do honest work. They affect the career of the world, being that by which things are what they are. There is an argument in the *Hippias Major* which makes this point explicitly. Socrates leads Hippias to agree that justice *is* something (ἔστι τι τοῦτο) and that this is true of wisdom too, for 'things which are just and wise and so on would not be such *by* them, if they were not something.' Because beautiful things are beautiful by beauty, Hippias is compelled to agree that beauty *is* something too. Socrates then goes on to ask, What is it? (287C-D). The argument is an excellent one. If beauty is that by which beautiful things are beautiful, and beautiful things exist, beauty exists. Beauty is not a word, a thought, or a concept. It is an existing thing, for the things it makes beautiful are existing things, and they are not made beautiful by our words or thoughts or concepts. This conflicts with the commonly held view that there is no commitment to the existence of Forms in the early dialogues, and that talk of them there is 'merely a matter of language'" ([1967], pp. 328-329; emphasis in original). For further critical discussion of Allen's claims, see Woodruff [1978].

12. Platonic scholars have not grasped the importance of this passage. They claim that Socrates is again concerned to insist that the natural scientists give answers that are open to counterexample. The following remarks are typical. "What Socrates intends to explain is what we have learned from Aristotle to call 'formal' causality, but he has no technical terminology ready to hand and therefore makes his meaning clear by examples. If we ask *why* something is beautiful, we may be told in one case, 'because it has a bright color,' in

another 'because it has such-and-such a shape.' The point that Socrates wants to make is that such answers are insufficient. There must be one *single* reason why we can predicate one and the same character, beauty, in all these cases. Having a bright color cannot be *the* cause of beauty, since the thing we call beautiful on the strength of its shape may be not colored at all..." (Taylor [1926], p. 202; emphasis in original). "It is obvious why such 'wise reasons' as color and shape are to be rejected. No given color or shape is either a necessary or a sufficient condition for a thing's being beautiful. The reason why the Form answer would be 'safest' (d8, e1, cf. 101d2, 105b7) is that any other answer could be refuted with counter-examples: a certain color or shape might be present in a thing, and yet that thing might not be beautiful, or might be ugly; and other things might be beautiful, even when that color or shape was lacking" (Gallop [1975], p. 183). "In <Plato's> view, if x is F and not F, it cannot explain why anything is F; it cannot, in other words, be that in virtue of which anything is F. Since some sensible properties of F suffer compresence, reference to them does not explain why anything is F, and so they cannot be what F-ness is. Since explanation is possible, in these cases things are F in virtue of a non-sensible property, the form of F. So Plato concludes that 'if anything else is beautiful besides the beautiful itself, it is so for no other reason than it participates in the beautiful' (*Phd.* 100c4-6). Or again, it is not because of 'bright color or shape or anything else of that sort' (100d1-2) that anything is beautiful; rather 'it is because the beautiful that all beautiful things are beautiful' (100d7-8). For sensible properties suffer compresence in so far as bright color, for example, is sometimes beautiful, sometimes ugly" (Fine [1993], p. 58).

13. "<The school of Parmenides and Melissus> saw, what no one previously had seen, that there could be no knowledge or wisdom without some unchanging entities..." (Aristotle, *On the Heavens* 298b22-24). "It had been asserted that everything in the world was subject to generation and nothing was ungenerated, but that after being generated some things remained indestructible while the rest were again destroyed. This had been asserted in the first instance by Hesiod and his followers, but afterwards outside his circle by the earliest natural philosophers. But what these thinkers maintained was that all else is being generated and is flowing, nothing having any stability, except one single thing which persists as the basis of all these transformations. So we may interpret statements of Heraclitus of Ephesus and many others" (26-34).

14. Socrates digresses into his intellectual history to explain and establish premises in his proof that the soul is immortal and that the philosopher should not fear death.

15. The *Phaedo* is a purported record of Socrates's last conversation on the day of his execution, and it is the fourth in a tetralogy of dialogues that purportedly describe Socrates's final days.

16. Other scholars have also made the comparison to Descartes's works. Witness, e.g., the following remarks. "The autobiography pages of <the *Phaedo*> are thus the ancient counterpart of Descartes' *Discours de la methode pour bein conduire sa rasion* with the interesting difference, (1) that though both philosophers are concerned to simplify philosophy by getting rid of a false and artificial method, Descartes' object is revive the very 'mechanical' interpretation of nature which Socrates rejected, and (2) that Socrates left it to the piety of another to do for his mental history what Descartes did for himself" (Taylor [1926], n. 1 on p. 200). "Socrates' account of his intellectual history is... a striking counterpart in ancient philosophy of Descartes's *Discourse on Method*, despite its rejection of 'mechanistic' explanations that Descartes was to revive. Cf. A. E. Taylor, *P. M. W.* 200, n. 1. Like Descartes, Socrates professes to be confused by the senses and to abandon their use. Both are pioneers of a new philosophical method. Both seek metaphysical foundations for mathematics and natural science. And both formulate basic certainties that fortify their religious convictions. Moreover, the autobiographical form of Socrates' story, as of Descartes's, disguises the true rigor of its author's thought" (Gallop [1975], p. 169).

17. In stating his interpretation, Vlastos slides from talk about the senses of the word αἰτία to talk about kinds of αἰτίαι. I do the same in restating his interpretation, but I also know that talk about senses of the word αἰτία and talk about kinds of αἰτίαι are not two ways to talk about the same thing. For a helpful discussion of this point, see Matthews [1972].

18. Other commentators have interpreted the *Phaedo* similarly. The following two claims are typical. "<Plato> is concerned to show that there are important forms of explanation that have nothing to do with causal agency" (Burge [1971], p. 4). "Consequently it is clear that in our *Phaedo* passage Socrates is not advancing a new theory of causation but in effect is considering the kinds of answers that may appropriately given to various Why-questions" (Mates [1973], p. 139).

19. For an index of the occurrences of the word αἰτία and its cognates in the Platonic corpus, see Brandwood [1976], pp. 23-24.

20. Like Vlastos and other scholars, Annas slides back and forth between talk about senses and talk about kinds.

21. This is one of the great unsolved problems in pre-Socratic scholarship. For some discussion, see Irwin [1989], pp. 29-32.

22. For a discussion of Anaxagoras's influence on Plato's thought in the *Phaedo*, see Brentlinger [1972a].

23. There is, perhaps, less agreement on this point than I suggest. Quine and Ryle seem to push for nominalism. For argument that this push for nominalism is misguided, see Searle [1969], pp. 103-106.

24. Many apparently believe that Plato concluded that the Forms are substances because he was subject to this misguided desire. The following statements are typical. "The Platonic mistake about the nature of forms goes with a liberal use of what we may class together as abstract-singular expressions like 'X-ness' or 'the attribute of being X'; these expressions are not just grammatically but also logically, argumentatively, handled as though they were proper names. I do not say that such abstract expressions looking like proper names should be totally banned; it would make things very difficult for philosophers. (I myself used 'human nature' in this way in the last paragraph.) But I do say that anyone who uses them ought to be ready to replace them on demand by use of the concrete predicates from which they are derived. (Thus: for 'neither oneness nor manyness is a mark of human nature itself' read 'whether there is one man or many men is irrelevant to what X must be if X is a man,' or something like that.) Sometimes this replacement is stylistically better, sometimes not. But it must be possible; a sentence with an *irreducible* abstract 'proper name' in it (say: 'Redness is an eternal object') is nonsense" (Geach [1969], pp. 46-47; emphasis in original). "We may ourselves prefer to resist the temptation to posit real entities like forms, or universals, to correspond to the structures of language. Plato himself, however, is implicitly committed to a broad theory of language as naming" (Rowe [1984], p. 59).

25. Some scholars maintain that in the middle dialogues Plato never argues for the Forms. Witness the following remarks. "In the early and middle dialogues, Plato does not argue for the claim that the Forms exist" (Prior [1985], p. 10). "<The Theory of Forms> is nowhere defended <in the *Phaedo*>, but is simply accepted without argument by all parties" (Gallop

[1975], p. 97). "The existence and immutability of the Forms is not *established* in the final section of the *Cratylus*: it is taken for granted at the outset (439D). As in the *Phaedo* and the *Republic*, the existence of fixed and eternal Forms is here postulated as an indispensable premise or *Hypothesis*, not defended as the conclusion of an argument. (Only in the *Timaeus* 51B-D does Plato present, or rather sketch, an explicit argument for the existence of Forms.) Nevertheless, the last section of the *Cratylus* comes perhaps as close as Plato ever does to showing just why immutable Forms are required for rational discourse and knowledge, as the *Parmenides* assumes (135B-C). The argument suggested in *Cratylus* 439D ff. is somewhat confused, and this confusion perhaps reflects Plato's deep reluctance to present the doctrine of Forms as a conclusion rather than as the starting-point (ἀρχή) for philosophic reasoning" (Kahn [1973], p. 169; emphasis in original).

26. As R. Hackforth correctly notes in the introduction to his 1955 translation and commentary on the *Phaedo*, the "<s>tudy of the *Phaedo* has, for English readers at least, been naturally associated for almost half a century with the name of John Burnet..." (p. ix).

27. Gail Fine makes a similar point. "Plato speaks of the philosopher as trying to be αὐτὸς καθ' αὑτόν so far as possible (65b-d); I do not think he means that the philosopher is trying to exist without his body (even though, to be sure, he regards philosophy as a preparation for death). Rather, he means that the philosopher tries to be uninfluenced by the body so far as possible; he tries to reason without being influenced by sense perception, which is misleading in the search for truth. To be αὐτὸ καθ' αὑτό, that is, is to be uninfluenced by, unmixed with, anything alien" ([1984], p. 60).

28. In his sketch of the early history of intellectual inquiry, Aristotle says that the naturalist tradition begins with Thales and the Milesians. Aristotle distinguishes this school of thought from the "school of Hesiod and the mythologists" (*Metaphysics* 983b20-21, 1000a29-20; *On the Heavens* 298b25-29). Irwin puts the right gloss on Aristotle's distinction. "Between the age of Homer (mid-eighth century) and the age of Socrates (late fifth century), the Greeks began systematic rational study of the natural order and the moral order. Aristotle distinguishes those who talk about gods and offer poetic or mythological accounts from those who offer rational accounts and that can be studied seriously. ... He calls the second group 'students of nature' or 'naturalists' (φυσιολόγοι), as opposed to Hesiod and his followers, because they abandon mythology to ask a new question, about the nature (φύσις) of things" ([1989], p. 20).

29. For helpful discussion, see Hussey [1990]. See also Hussey [1972].

30. I follow the text and translation in Kirk [1983].

31. "It is emphasized <in DK 28 B 8.53-9 that to allow two subjects of discourse instead of one> is not a matter of truth, but of a mistaken decision on the part of the 'mortal men.' Because it is a mistake to allow *two* forms instead of one, the giving of names to both of them is merely a matter of empty convention. Each of them must have not merely a name, but a set of characteristic predicates by which it is to be distinguished from the other; these too are supplied by arbitrary convention..." (Hussey [1972], p. 128; emphasis in original). "Mortals have placed their trust in a thoroughly deceptive order created by their own acts of naming giving; having done the naming, they believe that their names are names of real distinctions in things" (Nussbaum [1979], p. 74). "Parmenides' metaphysics and epistemology leave no room for cosmologies such as his Ionian predecessors had constructed nor indeed for any belief at all in the world our senses disclose to us" (Kirk [1983], p. 241). "Mortal opinions do not reflect the discovery of objective truth: the only alternative is to interpret them as products of conventions elaborated by the human mind. Now it follows that nothing about the world can explain why mortals should have such conventions or why they should invest them with the specific content they give them. Hence the currency of these conventions can only be represented as due to arbitrary fiat" (p. 256). "In deference to the Eleatic arguments the world of our experience is thought of as mere appearance, and theories become, for the first time, reductive: they tell us what is really there (atoms and void, for example) and the world of experience is consigned, mysteriously, to mere convention" (Annas [1988], p. 279).

32. I believe that Burnyeat is right to reject Irwin's explanation. The Theory of Forms does not stem from a simpleminded mistake. For my discussion of Irwin's interpretation, see Chapter 3.

33. Cornford is not alone. "<T>he doctrine of anamnesis clearly implies the separate existence of Ideas..." (Ross [1953], p. 25). "<W>hat is the precise nature of the ideal standards or Forms? The *Phaedo* theory of recollection clearly falls down unless they have separate existence, in a non-sensible form" (Gulley [1962], p. 29). Not everyone, however, agrees. Fine argues "that although Anamnesis and Affinity are compatible with separation, neither requires it" ([1984], p. 74).

34. The proper analysis of "separation" in this context is disputed. I. M. Crombie seems to me to be on the right track. "Aristotle says that whereas Socrates was interested in defining universals, he left it to Plato to treat them

as 'separable' things. What exactly this means is not clear. On the whole in Aristotle's language a 'separable' thing seems to be a 'substance'--something like the Cheshire Cat (as opposed to its simile) which can exist on its own" ([1963], p. 254). For some recent discussion, see Fine [1984], [1985], Morrison [1985a], [1985b], and Vlastos [1987].

35. Fine has argued for a different interpretation. "Aristotle is probably correct to say that at least some Forms, in some dialogues, are separate. But he and others are incorrect to suggest that Plato, beginning with the *Phaedo*, heralds separation as a new feature of Forms" ([1984], p. 33). "Aristotle is misleading to suggest that separation is a key feature of Forms, one Plato argues for, beginning with the *Phaedo*. Though Forms may well be separate, even in the *Phaedo*, neither Aristotle's account of separation, nor his belief that it is a matter of explicit concern to Plato, should be accepted" (p. 81). "For <Aristotle> writes as though separation is the big differentiator between Plato and Socrates, and this is not true; commitment to separation is as muted in the middle dialogues as lack of commitment to it is in the Socratic dialogues. Though separation may indeed divide Plato from Socrates, it does not play the central role in their contrasting stories that Aristotle suggests" (p. 85).

36. For an index of the occurrences of these words in the Platonic corpus, see Brandwood [1976], 965-966.

37. Gallop interprets the passage this way. "This passage is of utmost importance for understanding the Theory of Forms, since it argues that the Form Equal and by implication many other Forms (cf. 75c10-d5), must be non-identical with their sensible instances. ... The non-identity of the Form Equal with its sensible instances is inferred from the fact that the latter do, but the former does not, possess a certain property. Thus, the argument is of the following form: sensible equals have the property P; but the Form Equal does not have that property; therefore sensible equals and the Form Equal are not the same thing" ([1975], p. 121).

38. Hardy offers a similar interpretation of Plato's remarks. "In book V Plato compares opinion to a state of dreaming or of being dreamy (*ὀνειρώττειν*), and says that to be dreamy is 'to think that something which is like something else is not like but the same' (476c). His meaning is clear thought it is incorrectly expressed. The opinionative man cannot have the 'occurrent' thought that particulars are like forms; for he has not yet been 'reminded' of forms. He is a man conversant with copies and unaware that there is in the universe anything more real than they" ([1936], pp. 58-59.

39. Gallop offers a similar interpretation. "Does the present passage, in fact, improperly predicate 'equal' of the Form? Undeniably, it implies that the word 'equal' is grammatically predicated of it. For it must be taken to mean that sensible equals seem to us to fall short of being equal in the same way as the Form Equal *is equal*. The italicized words, though not in Burnet's text at 74d6, clearly have to be understood. ... But in what way 'is' the Form the Equal equal? ... A possible solution is to understand it not as attributing equality to the Form, but simply as an identity statement: the Form Equal *is* (identical with) Equal. Sensible equals are therefore not equal in the way that it is. For they are not identical with the Form, but only (to use the terminology introduced later) 'participate' in it. They 'fall short' of it, not in failing to be exactly equal, a claim for which the present passage provided no argument whatever, but rather in that they are not identical with it, as argued at 74b7-c6. They 'strive to be like it,' but fall short. ... On this view, the judgement that sensible equals 'fall short' of the Form Equal will not be that of a plain main confronted with logs that he regards as not quite equal. It will be the judgement of a philosopher, who has recognized that the Form is distinct from its sensible instances, and who, on sensing the latter, reflects upon how different they are from the former" ([1975], pp. 128-129; emphasis in original). Allen made a similar point years earlier. "<S>urely the force of the metaphor of imitation, and of the χωρισμός, is to indicate that the deficiency in question is that of one *type* of thing with respect to something of another type: 'deficiency' is here a categorial distinction..." ([1960], p. 52; emphasis in original).

40. Penner is concerned to combat so-called "diagnostic" interpretations that have dominated the scholarly literature on Plato. "Now in attributing to Plato a view that he could have had in mind, the present interpretation contrasts with other well-known interpretations of this and other similar passages. On these other interpretations, Plato is committed to positions which he could not have consciously taken up, since their immediate implications are so crazy he could only have arrived at those positions as a result of some grammatical error or some seriously misleading analogy suggested by our language, the operation of which was sufficiently unconscious that Plato did not notice it. Such are the 'diagnostic' interpretations offered by Gregory Vlastos and G. E. L. Owen, two of the most influential Plato scholars of recent years" (p. 44).

Chapter 3

1. Some scholars conjecture that although he does not name him, Plato has Antisthenes in mind. For some discussion, see Grote [1885], pp. 163-165. See also Adam [1905], pp. 337-338, 341.

2. Socrates slides from "appear F and not-F" in 479b3-5 to "is no more said to be F than not-F" in b6-9-c5, but I do not think this marks any confusion on his part. For a contrary suggestion, see White [1979], p. 161.

3. Heraclitus seems to use the verb δοκέω to make a similar point. Kahn brings this out clearly in his translations ([1979]), which I follow. "Although the λόγος is shared, the many live as though their thinking were a private possession" (DK 22 B 2). "Most men do not think things in the way they encounter them, nor do they recognize what they experience, but they believe their own opinions" (DK 22 B 17). The Greek for "believe their own opinions" is ἑωυτοῖσι δοκέουσι, and this phrase, as Kahn notes, can equally well mean "imagine for themselves" or "seem to themselves." Compare Xenophanes's remarks in the following fragment: "As for certain truth, no man has known, nor will any know it, concerning the gods and about all the other things that I am saying. For however much he might chance to say what has actually been brought to pass, still he himself does not *know*; it is *opinion* that is constructed in all cases" (DK 21 B 34; Hussey [1990], p. 18; emphasis in Hussey's translation).

4. In his edition of the *Republic*, Adam offers a similar interpretation. "The words <τὰ τῶν πολλῶν πολλὰ νόμιμα at 479d3-4> refer to general rules, standards, canons, believed in by the multitude (cf. τὰ τῶν πολλῶν δόγματα VI 493 A), who have on every single subject many such standards (πολλὰ νόμιμα), mutually inconsistent and uncoordinated, because they do not know that τὸ καλόν, τὸ ἀγαθόν etc., are each of them ἕν" ([1905], p. 343). Hardy offers a similar interpretation. "An opinion or formula (νόμιμον), such as that of Polemarchus about justice, has some basis in facts but breaks down when confronted by further facts. The statement that it 'tumbles about between what is and what is not' (*Republic*, 479d) might be interpreted as simply a highly rhetorical way of saying this, viz., that it is false but has some foundation in facts. If this is so, instead of speaking of the objects of opinion as between being and not being, Plato ought to have spoken of opinions as more or less false, or more or less removed from the truth" ([1936], pp. 31-32). Gosling and Crombie seem to have something similar in mind. Gosling suggests that

the phrase means "something like 'customary rules about the beautiful and the just'" ([1960], p. 120). Crombie says that his interpretation "owes much to discussions with Mr. Gosling" ([1963], n. 1 on p. 53), and, indeed, he makes roughly Gosling's point in much more detail. "It is the multifarious conventional opinions of ordinary men which he argues must roll about between ὄν and μὴ ὄν, and these are what we should call beliefs. How it can be that beliefs can perform the extraordinary feat of 'rolling around between' (this perhaps means 'occupying some point anywhere on the scale between') 'the existent and the non-existent' has I hope been made clear above. I certainly cannot imagine how the subject-matter of beliefs (the things that we have beliefs about) could do anything of the kind. That beauty is a matter of bright coloring is perhaps one of the multifarious conventional opinions of ordinary men about beauty, and the 'quasi-fact' which this clause stands for (namely beauty's being a matter of bright coloring) is not a fact or a reality, but on the other hand it is not a complete figment either. It is between being a fact or reality and being a figment, just as the corresponding state of δόξα is between grasping perfectly and being completely out of touch" (p. 58).

5. In his commentary on the *Republic*, White claims that Plato only intends to show that Forms and sensibles are distinct. "Plato's main concern <in 476d-480a> is not to argue for the existence of Forms, and he does so only very indirectly and briefly. In the passage in which he might appear to be giving an argument for their existence, 479a-b, his aim is really to show instead that sensible objects--i.e., what the lovers of sight and sounds are concerned with--are 'between what is and what is not,' and not to prove that *there is* such a thing as 'what is' (i.e., Forms). In effect, therefore, the passage is supposed to show only the *distinctness* of sensibles from 'what is,' whereas it assumes that *there are* such things as 'what is'" ([1979], pp. 159-160; emphasis in original).

6. Gosling and Cherniss make similar points. "To say that there is a Form of F is more than to say that 'F' has meaning and can be defined; it is to claim that statements of the form 'X is F' are either true or false, and their acceptability is to be judged objectively and not by reference to the tastes of individuals or groups. In short, the claim that there is a Form of F is tantamount to the claim that ἐπιστήμη is possible in a certain area" (Gosling [1973], p. 174). "The phenomena for which Plato had to account were of three kinds, ethical, epistemological, and ontological" (Cherniss [1936], p. 16). "The necessity for an absolute standard of ethics which would not depend upon the contradictory phenomena of conventional conduct but would be a measure of human activities instead of being measured by them was forcibly

demonstrated by the plight into which Democritus had fallen" (p 17) Plato came to believe that "the definitions requisite to normative ethics are possible only on the assumption that there exist, apart from the phenomena, substantive objects of these definitions which alone are the source of the values attaching to phenomenal existence The possibility of ethical distinctions, then, implies objective differences which can be accounted for only by the hypothesis of substantive ideas" (p 18)

7 Frege makes a similar point in *The Foundations of Arithmetic* "If everything were in continual flux, and nothing maintained itself fixed for all time, there would no longer be any possibility of getting to know anything about the world and everything would be plunged in confusion" (p vii)

8 Gosling, again, makes a similar point "Plato is not interested in what makes language possible, and so not in problems of meaning or of universals He is interested in discovering whether ἐπιστήμη is possible, and that in his view involves showing that the universe is a system of a certain sort Assertions that the Forms are necessary for λόγος (cf *Parmenides* 135b-c) see them as necessary for argument not speech" ([1973], p 197)

9 In translating passages from the *Timaeus*, I follow Cornford [1937]

10 "Socrates admits that long speeches are beyond him and concedes to Protagoras on that score But when it comes to dialectical discussion and understanding the give and take of argument, I would be surprised if he yields to anyone Now, if Protagoras admits that he is Socrates's inferior in dialectic, that should be enough for Socrates But if he contests the point, let him engage in a question-and-answer dialogue and not spin out a long speech every time he answers, fending off the issues because he does not want to be accountable, and going on and on until most of the listeners have forgotten what the question was about, although I guarantee you Socrates will not forget, no matter how he jokes about his memory So I think that Socrates has the stronger case" (*Protagoras* 336b8-d5)

11 Edward Hussey puts the point well in his excellent commentary on the pre-Socratics "The assumptions and methods of the sophists were attacked in the next century by Plato, whose criticism by its brilliance and power has influenced all subsequent estimates But even in their own time the sophists will have had articulate opponents, most notably Socrates, whose method of discussion by question and answer is a way of dissociating two things that the sophists were prone to confuse the force of reason and the power of the spoken word So far as the sophists can be divided into an earlier and a later generation, the change between the two groups is intelligible as a response to

criticism from Socrates and others; also, possibly, to the harsher realities of the Peloponnesian War. The later sophists have shed the comfortably tolerant and conservative assumptions of Protagoras and his contemporaries, and are driven to propound radical theories of morals and politics (about which a little will be said later). The difference is marked between Plato's treatment of the older sophists, who are handled with some affection and respect, even while their philosophical shallowness and their minor faults of character are being revealed, and his portrayal of members of the younger generation--such as Polus in the *Gorgias* and Thrasymachus in the *Republic*--who are shown as thoroughly unsympathetic" ([1972], pp. 117-118).

12. In the *Republic*, Socrates makes similar points. "And have you noticed," he asks Adeimantus, "that opinions without knowledge are ugly things? The best of them are blind. Does it seem to you that those who opine some truth without intelligence (*νοῦς*) are no different from blind people who yet follow the right road?" (506c6-9). Adeimantus agrees with Socrates. He says, in reply, that such people "are no different" (10) from such blind people.

13. A. E. Taylor may have in mind a similar interpretation. "The founding of the Academy is the turning-point in Plato's life, and in some ways the most memorable event in the history of Western European science. For Plato it meant that, after long waiting, he had found his true work in life. He was henceforth to be the first president of a permanent institution for the prosecution of science by original research. In one way the career was not a wholly unprecedented one. Plato's rather older contemporary Isocrates presided in the same way over an establishment for higher education, and it is likely that his school was rather the older of the two. The novel thing about the Platonic Academy was that it was an institution for the prosecution of *scientific* study. Isocrates, like Plato, believed in training young men for public life. But unlike Plato he held the opinion of the 'man in the street' about the uselessness of science. It was his boast that the education he had to offer was not founded on hard and abstract science with no visible humanistic interest about it; he professed to teach 'opinions,' as we should say, to provide the ambitious aspirant to public life with 'points of view,' and to train him to express his 'point of view' with the maximum of polish and persuasiveness. This is just the aim of 'journalism' in its best forms, and Isocrates is the spiritual father of all the 'essayists,' from his own day to ours, who practice the agreeable and sometimes beneficial art of saying nothing, or saying the commonplace, in a perfect style. ... Plato's rival scheme meant the practical application to education of the conviction which had become permanent with

him that the hope of the world depends on the union of political power and genuine science" ([1926], p. 5; emphasis in original).

14. According to Quine in "On what there is," the conceptualist "holds that there are universals but they are man-made" (p. 14) and the nominalist "object<s> to admitting abstract entities at all, even in the restrained sense of man-made entities" (p. 15). Not everyone, however, understands the positions in quite this way. "Traditionally there have been two versions of a non-realist theory of universals. Universals have been seen as essentially linguistic entities, the 'general names' of grammatical classification. Alternatively they have been seen as consisting not so much in naming what we call common features of the external world as in thinking of such features as common. 'Nominalism' is an ambiguous label. Sometimes it has been used to cover any non-realist theory and is therefore equivalent to 'post rem.' Sometimes it has been used to identify universals with the general words--say adjectives, common nouns and verbs--of language. In this narrow sense Aristotle is no more a nominalist than Aquinas or indeed Ockham. The traditional label which should be attached to him is that of conceptualism. The common features that we attribute to the external world are not names, in so far as names do not belong to language but to this or that language. They are to be found in what is for Aristotle logically prior to language, namely thoughts, of which 'concepts' is a synonym" (Lloyd [1981], p. 2).

15. Penner tries to find textual support for his claim in the way that Socrates characterizes the lover of spectacles. Socrates does not explicitly allow the lover of spectacles to believe in anything other than particulars. He makes the lover of spectacles accept the many things that are F, but reject the Form the F itself. "The many *νόμιμα* at D3-4 must surely be the many beautifuls at E1 which in turn can surely not be other than the many beautifuls [A3, 5] that the 'good fellow' [A1] who is the lover of sights believes in. What are the many beautifuls the lover of sights believes in? Surely the many beautiful sounds, colors, shapes and so forth" (p. 236). Although Penner claims otherwise, Socrates's characterization is too weak to show anything but that the lover of spectacles is not a realist about the truth-conditions for statements that predicate beauty and other such properties. Socrates neither explicitly insists that the lover of spectacles is a nominalist nor explicitly denies that he is a conventionalist. Plato takes no stand on this issue.

16. Witness, e.g., the following claims. "He thought that understanding what it is to be f is acquaintance with a sample, specimen or paradigm thing-that-is-f. He noticed that there is a difference between, for example, understanding what it is to be *like Socrates* and understanding, simply and

without qualification, what it is to be *like*. But if the latter is acquaintance with a sample, then it can differ from the former only by a difference in the sample, which must thus be a thing that is like but not like Socrates. By generalization from this case he concluded that it is necessary to construe understanding, simply and without qualification, what it is to be like as acquaintance with some paradigm that is simply and without qualification, like; and such a paradigm, since it is not to be found in the physical world, must be a form" (Kirwan [1974], pp. 112-113; emphasis in original). "My view is that, at least in the *Phaedo* and the middle books of the *Republic*, Plato envisaged Forms for these incomplete predicates only. In the *Phaedo* (100B-105C) Socrates distinguishes between sensible particulars, their properties or characters, and the Forms. These Forms, and all the Forms mentioned elsewhere in the *Phaedo* and in the middle books of the *Republic*, correspond to incomplete predicates. Plato is introducing a new class of objects which the soul, confused by the contradictory reports of the senses (cf. *Rep* 524 BD), has to contemplate if it is to grasp what beauty, justice, or tallness are in themselves. Unlike sensible particulars, the Form and the characters of beauty are completely, essentially, beautiful. If a particular is beautiful, it will also be ugly in another context; that *very same* particular will be ugly, without undergoing any change. But the Form and the characters of beauty would cease to be what they are if they were ever qualified by ugliness" (Nehamas [1975], pp. 108-109; emphasis in original).

17. "It has been repeatedly pointed out that Plato's line of thought here goes astray, because of a failure on his part to take account of the workings of, in particular, relational predicates. Wanting an unqualified sample of 'large,' *tout court*, but finding the sensible world full only of samples of 'large compared to,' or like predicates, he looks elsewhere for the unqualified instance which he wants" (White [1976], p. 68). "Some will be inclined to think that the view just now described is too clearly mistaken, and even bizarre, to be rightly ascribed to Plato. Such an impression, I think, is the result of an overexposure to contemporary philosophical discussions..." (p. 70).

18. With these remarks, although he does not mention Aristotle, Owen politely sets aside Aristotle's account of the genesis of Plato's Theory of Forms.

19. For excellent commentary on the *Parmenides*, see Allen [1983].

20. R. M. Hare diagnoses Plato's mistake as follows. "It is an example of the perceptive genius of that great logician, that in spite of being altogether at sea concerning the *source* of our philosophical knowledge... he discovered the very close logical analogies between philosophical discoveries and remembering. He was wrong in supposing that we are remembering something that we learned in a former life--just as more recent mythologists have been wrong in thinking that we are discerning the structure of some entities called 'facts.' What we are actually remembering is what we learnt on our mothers' knees, and cannot remember learning" ([1960], p. 161; emphasis in original).

21. Vlastos acknowledges that he was influenced by Owen's views on Plato. "<M>y greatest debt is to Professor G. E. L. Owen, whose views on this topic I came to know from one of his unpublished MSS, and from discussion with him in Oxford in 1960" ([1965], n. 6 on p. 59).

22. Archer-Hind may have this same sort of interpretation in mind. "Plato was a true scholar of Herakleitos: he saw that in things which abide not, but ever fluctuate and fleet away, there can be no stable truth nor basis of knowledge. Knowledge is of that which abides firm and changes not, if there exists such in the universe. And now Plato despairs no longer of finding this existence, he sees it in the principle of universals. But not in the universals as he received from Sokrates; a change must pass upon them before they will serve his end" ([1894], p. xxxviii). "<The Sokratic universal is a concept that> is simply a thought in our mind, it has no existence of its own: it is, as Protagoras might tell us, doubly unsubstantial; for it is formed from the impressions produced by an ever-changing object upon a subject that is never constant: the image of a flitting insect in running water is not more shadowy than the perceptions from which our definition is formed. Knowledge demands for its object a constant self-existent verity. This led Plato to the hypostatisation of the universal. In place of the mental concept derived from particulars he gives us an essential idea prior to particulars, whereof it is the cause" (p. xxxix).

23. Fine follows Irwin. "The sightlovers do not acknowledge Forms; all their accounts or explanations of beauty, justice, and the like, will be phrased in terms of sensibles. They will define beauty, for example, as the brightly colored; their accounts will refer to and be based on such observable properties. But we know from earlier steps, and from elsewhere, that such properties are F and not F; some cases of bright coloring are beautiful, others not" ([1978], p. 136).

24. His book came to my attention too late for me to give it full consideration, but Moravcsik seems to offer a similar interpretation. "There is a third argument in the larger section of Book 5 of the *Republic* that deals with the 'great contrast' between understanding and opinion. In this argument (475d-476b) the objects of the opinions and beliefs of the lovers of sights and sounds are contrasted with the objects of understanding. Further, the latter are linked to the Forms by the remark that the Forms have the unity appropriate to objects of understanding (476a2-6). The argument for the existence of the Forms can thus be reconstructed as (1) <t>here is understanding and it requires objects with a certain kind of unity; (2) <t>he Forms are entities with the required unity; <therefore> <t>he Forms exist as objects of understanding. ... We should note here that this argument can cover both the range posited by the first and that corresponding to the second of the arguments surveyed above" ([1992], p. 68).

Chapter 4

1. In the context of his attempts to explain the genesis of the Theory of Forms, Aristotle often puts the words καθόλου ('universal') and ἰδέα ('idea') to different uses. He uses the first in his description of Socrates's search for definitions, and he uses the second for the metaphysical objects that, by the time of the middle dialogues, Plato supposed Socrates was asking about. Aristotle maintains that "Socrates did not make the universals be separate, nor the definitions, but they did, and called such entities Ideas" (*Metaphysics* 1078b30-32). Plato typically uses a form of εἶδος ('form') or ἰδέα ('idea') for what Socrates uses his "What is F?" question to ask about. He never uses καθόλου in the corpus (Brandwood [1976]), and he may not use the word at all. He does, however, once use the phrase κατὰ ὅλου in the *Meno* at 77a6, and this use is an important antecedent to Aristotle's frequent use of καθόλου.

2. Platonic scholars, however, are not all agreed on this point. Indeed, some make just the opposite claim. Annas, e.g., insists that "Aristotle's account of the theory of Forms can be questioned" ([1976], p. 153).

3. Grice, Pears, and Strawson seem to offer this interpretation. "<I>t may be that Plato believed in the supreme reality of those eternal changeless entities, the Forms, partly because he wished to preserve the possibility of scientific knowledge and yet was threatened with having to reject it; for philosophical reflection made it appear that knowledge of perceptible things was impossible, since perceptible things were constantly in process of change. In order, then, to resolve this quandary, to find a subject-matter for scientific knowledge, Plato was led to introduce, and to exalt, the Forms. But the idea that knowledge of changeable things is impossible, which gives rise to the quandary, may itself arise from a preference: from the feeling that to be unchanging (and so permanent and stable) is so much better than to be changing (and so fleeting and insecure) that only knowledge of unchanging things is *worthy* of the name of knowledge" ([1957], pp. 20-21; emphasis in original).

4. Other scholars make a similar point. Witness the following statements. "It is a mistake to draw a sharp distinction, as is sometimes done, between a δόξα that apprehends γιγνόμενα and a δόξα that vaguely and imperfectly apprehends ὄντα" (Bluck [1961], p. 36). "<T>o take the distinction in *Republic* V between τὸ δοξαστόν and τὸ γνωστόν as meaning that the ἐπιστήμων cannot make valid judgements about questions of practical morality

is take the distinction out of its context and to use it in a way that Plato can never have intended. The general purpose of the *Republic* V passage is to reject mere 'culture' in favor of ἐπιστήμη as a qualification for *ruling the state*, so that Plato must have thought of ἐπιστήμονες as being particularly well equipped to deal with administrative problems in the sensible world" (pp. 37-38; emphasis in original). "<In book V of the *Republic*,> although Plato in some way correlates knowledge with Forms, and belief with sensibles, he does not say that there is knowledge only of Forms or belief only about sensibles. All he argues is the weaker claim that to know, one must, first of all, know Forms; restricted to sensibles, one cannot achieve knowledge. This makes Forms the primary objects of knowledge, but not necessarily the only ones; knowledge begins, but need not end, with knowledge of Forms" (Fine [1978], p. 122). "<Socrates> does argue, at the close of the passage <in book V of the *Republic*>, that whoever knows will know Forms, since it is only by reference to them that correct accounts are forthcoming; if one is restricted to sensibles, like the sightlovers, the most one can attain is belief. But although knowledge begins with Forms, it need not end with them..." (p. 139). "<T>his skeptical result would be quite surprising in the context of the *Republic*, which aims to persuade us that philosophers should rule, since only they have knowledge, and knowledge is necessary for good ruling. If their knowledge is only of Forms--if, like the rest of us, they only have belief about the sensible world--it is unclear why they are specially fitted to rule in this world. They don't know, any more than the rest of us do, which laws to enact" (Fine [1990], p. 86).

5. Annas understands Aristotle's objection similarly. "Forms cannot contribute to knowledge of things, because they are not their substance or reality. For Aristotle definitions of what a thing is, which define its reality, are the first principles of scientific knowledge. The only reason why Forms cannot be the reality of things is that they are not 'in' them: Aristotle's point seems to be that Platonic Forms cannot fulfill the useful role of Aristotelian formal causes, because they are 'separate' and not, like Aristotelian forms, inherent in certain kinds of matter. This is more a confrontation of two philosophical positions than an argument. Aristotle adds that if Forms were literally in things they would make a real contribution to the natures of things, but that this is not a real option, for the theory of Forms presupposes that it is impossible" ([1976], p. 160).

6. Another reason to doubt that this explanation is correct is that otherwise Aristotle attacks the Theory of Forms in an uncharacteristically obtuse way. One direct and easy way for Aristotle to disarm Plato's argument for the

conclusion that the universals exist separately would be simply to reject as obviously false the premise that the ordinary objects are always changing in every way, but this is something Aristotle never does. Given that he is in general a very efficient critic, and given the enthusiasm with which he scotches the Theory of Forms, such an oversight would be extremely surprising. Irwin makes a similar claim. "<Aristotle> argues against Cratylus..., <so> if Aristotle ascribes to Plato this extreme Cratylean view..., why does he not attack Plato too? He never suggests that Plato abandoned the doctrine of sensibles in flux and separated Forms; and he would hardly agree that the incoherence of extreme Heracleiteanism about the observable world is avoided by the postulation of unchanging Forms separated from the particulars... <H>is failure to criticize Plato... is uncharacteristically and mistakenly charitable" ([1977a], p. 12).

7. "A central thought is that the Form F is what has the quality F essentially; this is the heart of the most extended argument for Forms, which recurs in different guises (*Phaedo* 74-6, *Republic* 475-80, 523-5). When we say of things in our experience that they are just, or equal, we can equally well ascribe to them the opposite of that quality, for a variety of reasons, such as applying a different standard. This possibility, it is claimed, shows that in our experience there are no beautiful things that are not also ugly, no just actions that are not also unjust. So (unless we are to infer, which Plato never does, that the use of these terms is always relative to some standard) they cannot be applied without the possibility of the opposite also applying, within our experience, but only to the Form of F which is essentially F and never not-F, and which the F things and actions in our experience 'partake' (in so far as we can correctly call them F) but also 'fall short of' (in so far as we can also say of them that they are not F)" ([1988], pp. 289-290).

8. The Aristotelian corpus stems from an edition that Andronicus created many generations after Aristotle's death, and some of the material he incorporated may have come from senior members of the Lyceum. This is far from certain, but given the evidence concerning the history of Aristotle's library, it is certainly a real possibility. For discussion of Aristotle's library and his school, see Lynch [1972] and Grayeff [1974].

9. My translation of passages from the *Theaetetus* follows Levett's translation in Burnyeat [1990].

10. Plato has his character make a similar point in the *Laws*. The Athenian reports that "<they assert that> right does not at all exist by nature, but men are perpetually disputing about it and altering it, and whatever alteration they

make at any time is at that time authoritative, by design and convention, not in any way by nature" (889e6-890a2).

11. "At times, Theaetetus, I come across people who do not seem to me somehow to be pregnant. Then I realize that they have no need of me, and with the best will in the world I undertake the business of match-making; and I think I am good enough at guessing with whom they might profitably keep company. Many of them I have given away to Prodicus, and a great number also to other wise and inspired persons" (*Theaetetus* 151b1-6).

12. Plato also claims that "Heraclitus somewhere says that all things give way and nothing stays, and likening existing things to the stream of a river, he says that you would not step twice into the same river" (402a8-10), but this attribution is probably not accurate. In an uncontested fragment from the beginning of his book on nature (Aristotle, *Rhetoric* 1407b11), Heraclitus makes the following remarks. "Although this account (λόγος) holds forever, men ever fail to comprehend, both before hearing it and once they have heard. Although all things come to pass in accordance with this account, men are like the untried when they try such words and works as I set forth, distinguishing each according to its nature (φύσις) and telling how it holds (ἔχω). But other men are oblivious of what they do awake, just as they are forgetful of what they do asleep" (DK 22 B 1, after Kahn [1979], but replacing 'holds' for 'is' as the last word of the second to last sentence). Heraclitus says nothing in this fragment to suggest that he believes that rivers, or any other such objects, cannot survive the passage of time. His stated goal is to show how each thing "holds" with respect to its "nature." This nature is determined by the λόγος, and although he could have believed that the λόγος entails that rivers and all other ordinary objects of experience are such that they cannot survive the passage of time, this seems very unlikely.

13. Brentlinger rejects Aristotle's explanation of the origin of the Theory of Forms. A "weakness in the Aristotelian interpretation of separation is that there is no hint in it of a philosophical reason *why* Plato should have accepted the flux doctrine" ([1972a], p. 62; emphasis in original). "<I>t is very peculiar indeed if Plato, the exponent of rationality, accepted this extreme, highly paradoxical view, so basic to his philosophy as a whole, as an unexamined assumption. However, Aristotle's interpretation gives no reason why he accepted it. We are told only that he was familiar with the doctrine from his youth--hardly a reason why he should accept it as a mature philosopher" (pp. 62-63). Brentlinger offers "a different explanation, according to which the flux theory is not a motive for the separation doctrine, but a *consequence* of it" (p. 63; emphasis in original).

14. Bolton is happy enough to accept that Plato is inconsistent. "Could Plato have believed that sensible objects are in no way determinate or stable and, hence, in no way accurately describable? Doesn't he claim in the *Phaedo* that equal objects are at least deficiently equal (74d-e)? Doesn't he also claim that such objects are reminiscent of the form of equality (75a-b)? And does this not require a certain stability? If so how could Plato have failed to realize it? The answer to these questions is that, given what he clearly says, we must conclude that Plato's position was incoherent.... It is perhaps a curious fact that Plato did not perceive from the beginning the incoherence of his position. But he is in good company. From Parmenides to Kant to Wittgenstein philosophers have been unable to maintain silence about that which they took to be literally ineffable" (pp. 83-84).

15. In his translation of the *Phaedo*, Gallop uses 'practically.'

16. Prior presses for a similar interpretation. "Forms are also constant and invariant, never changing in any respect (*Phaedo* 78d), whereas phenomena are 'entirely opposite to those and so to speak never in the same state either relative to themselves or to one another' (78e2-4). Again, it is not clear precisely what is meant here. The constancy of the Forms is clear enough, but when Plato asserts that phenomena are never in the same state, does he mean that *every* property of every phenomenal object is in change at each moment, or merely that *some* property of every object can be found which is changing at a given moment? The former view we may call 'radical Heracliteanism'; it is the position Plato attributes to Heraclitus in the *Theaetetus* and which he shows here to be incoherent (182a-183c). Some scholars have attributed this view to Plato himself, at least in the middle dialogues; but, in so far as Plato believes in some similarity between phenomena and the Forms, it would perhaps be unwise to saddle him with a view of phenomena which makes any similarity impossible, given that a less extreme interpretation of his claim in this passage is possible" ([1985], pp. 30-31; emphasis in original).

17. Fine follows Irwin. "It is relational, not real, change that chiefly concerns Plato in arguing for Forms--that what is large, for example, is also small, or that what is heavy is also light. Such change, moreover, attaches not only to sensible particulars--Theaetetus is tall (in relation to Socrates) and short (in relation to Milo)--but also, and primarily, to sensible properties--the action type of standing firm in battle is both brave and cowardly. The flux of sensibles on which Plato focuses attention in arguing for Forms, then, is compresence of opposites as it attaches to sensible particulars and, more especially, to sensible properties" ([1984], p. 66).

1. Taylor argues that Plato uses his character, Timaeus, to express a fifth-century Pythagorean doctrine, not to express his own views ([1928], p. 11), but his argument is not widely accepted. For convincing criticism of Taylor's view, see Cornford [1937], pp. v-ix.

2. "With the exception of Taylor, most ancient and modern interpreters have agreed that the character Timaeus represents Plato's views on cosmology, just as Socrates in the middle dialogues speaks for Plato" (Prior [1985], p. 87).

3. 'Cosmos' derives from the Greek noun κόσμος. This noun is formed from the verb κοσμέω, which means "to set in order," "to marshal," or "to arrange." For helpful discussion of the etymology, see Taylor [1928], pp. 65-66.

4. This occurrence of the word ἀεί ('always') is poorly attested in the Platonic manuscripts. For discussion, see Hackforth [1959], Whittaker [1969], [1973], Robinson [1979], and Dillon [1989].

5. Unless otherwise indicated, except for a few passages that are based on Cornford [1937], the translations of passages from the *Timaeus* are mine.

6. "These so-called 'elements,' or some one or more of them, had been regarded by Ionian science and by popular thought as the *original principles* (ἀρχαί) of all things. The earliest Ionians had chosen water or air as the one *original condition* (ἀρχή) from which a manifold world had emerged, and also as the *fundamental form* (φύσις) of which all things at all times ultimately consist. Empedocles had taken all four and clearly endowed them with the status of *elements*, irreducible and immutable factors which are merely mixed and rearranged in space to yield all the variety of compounds. The unexplained existence of the four elements had been taken as the *starting-point* for cosmogony..." (Cornford [1937], pp. 161-162; emphasis in original).

7. "Plato agreed with Empedocles to the extent of believing that fire, air, water, and earth are the only distinct corporeal substances which are not compounds of other distinct corporeal substances. He also accepted, with Empedocles, that they are irreducibly four in number, no two of them being in reality identical" (Mills [1968], p. 156).

8. For a helpful discussion of the Receptacle, see Kung [1988].

9. For helpful discussion, see Furth [1988].

10. In II.3 of *Generation and Corruption*, Aristotle maintains that fire is stuff that is hot and dry, air is stuff that is wet and hot, water is stuff that is cold and dry, and earth is stuff that is cold and dry. For an interesting conjecture about this sort of scheme in Heraclitus's thought, see Hussey [1972], pp. 51-53.

11. In this way, aside from its metaphysical commitments, Plato's view is reminiscent of modern views. Dummett gives such a modern view. "We cannot give a correct representation of our language if we do not recognize, as underlying that level at which we may be said to refer to objects and to predicate things of them, a more fundamental level at which there is as yet no reference to or discernment of objects" ([1981b], p. 216). "<T>he picture of reality as an amorphous lump, not at the outset articulated into objects, is a correct one..." (p. 218). "Such an articulation may be accomplished in any one of many different ways: we slice up reality into distinct individual objects by selecting a particular criterion of identity" ([1981a], p. 563). "Any reference to objects, properly so called, and any predication of objects, involves the tacit or explicit invocation of a criterion of identity..." ([1981b], p. 218). "Countable general terms, in order to be able to be used to form definite descriptions, have first to be assigned a further use, namely in statements of identification (where this is understood to mean sentences of the form 'This is the same X as that,' and the like). This involves learning when it is right to point in two different directions on the same occasion, and say, 'This is the same X as that'; and when it is right to say things like, 'This is the same X as the one which we saw on such-and-such a previous occasion.' That feature of the sense of the countable general term 'X' which determines the truth-conditions for such sentences may be called the criterion of identity associated with 'X'..." ([1981a], p. 573).

12. "Plato's Greek <in *Timaeus* 49c-50b> is in places notoriously hard to translate, and as a result there has been much divergence between the interpretations that have been offered of the passages's philosophical significance" (Mills [1968], p. 152).

13. Lee attempts to defend "the main line" of Cherniss's translation and interpretation (p. 1), and for reasons that I shall make clear, I do not accept Cherniss's interpretation.

14. For detailed and helpful discussions of the gold example, see Lee [1971] and Mohr [1978].

15. Zeyl correctly emphasizes this point. He insists that "Plato is drawing our attention to something that is *difficult*, not something that is impossible or illegitimate" ([1975], p. 128; emphasis in the original).

16. The Greek word τοιοῦτος ('such-and-such') is a demonstrative pronoun that is used in reply to the interrogative ποῖος ('of what sort'). For discussion see Smyth [1956], sections 333-340.

17. This is one of the most discussed passages in the corpus. For some of the many discussions, see Cherniss [1954], Gulley [1960], Lee [1967], Mills [1968], Zeyl [1975], Mohr [1980], and Gill [1987].

18. The Greek is ambiguous, but for reasons that I shall make clear, I agree with Cherniss and others that the nouns πῦρ ('fire') and ὕδωρ ('water') are secondary objects of the verb προσαγορεύειν ('to call'). For argument for this resolution of the ambiguity, see Cherniss [1954], n. 3 on pp. 115-116; Lee [1967], n. 9 on p. 4; Mills [1968], p. 154; Reed [1972], pp. 65-66; and Mohr [1980], n. 5 on p. 87. For argument for taking the nouns to be primary objects, see Zeyl [1975], pp. 131-136.

19. Dummett makes a similar point about Frege. "His recognition that senses are not inner mental contents was one of his principal motives for locating them outside the mind in a special compartment of reality independent of our apprehension of it.... Only so did he think he could safeguard the objectivity of sense: and that was precisely because he did not have the idea of identifying the sense of a word with its observable use" ([1981b], p. 52). "We have seen that the objectivity of sense is sufficiently guaranteed by its being expressed within the common language: it was not necessary for Frege, in order to safeguard that objectivity, to view it as having an existence independent even of the means of expressing it" ([1981a], p. 680).

20. In his interpretation of the *Timaeus*, Lee follows Cherniss on this point. See [1966], pp. 359-360 and [1967], pp. 17-18.

21. "Cherniss's view appears to entail that Plato's theory recognizes *four* types of levels--the Forms, the Receptacle, the copies of Forms and phenomenal appearances. Yet Plato himself is emphatic on the point that in this paragraph his concern is to make out a *threefold* distinction--to introduce just *one* extra item (*viz.*, the Receptacle) to be added to the *twofold* distinction already drawn at 27d-28a)" (Mills [1968], p. 154; emphasis in original). "The introduction of a fourth ontological stratum, however, runs up against Plato's emphatic and repeated assertion that he is dealing with only three strata (cf. Mills 154, 170)" (Mohr [1978], p. 106). "It is well known that Cherniss'

reading commits Plato to a fourfold division of entities (Form, Receptacle, immanent character or property and instance of property), whereas Plato insists (51e-52b) on a threefold division (cf. Mills, 1968, pp. 153-154, 170)" (Prior [1985], n. 15 on p. 124). "It is puzzling that items which are meant to do so much work simply escape the net of Plato's classification" (Gill [1987], p. 42).

22. The controversy is very familiar to Platonic scholars. Hackforth describes it as follows. "As is well known, there have been, from the very first age of Platonic study, two directly opposed opinions on the main point. Aristotle seems to regard it as plain, incontrovertible fact that Plato described the universe as having come to be; whereas his contemporary Xenocrates, the third Head of the Academy, held that the account put into the mouth of Timaeus ought to be interpreted as analysis of the world's existing structure in the guise of a story of its construction in the past, Plato's object being to facilitate exposition..." ([1959], p. 9).

23. There are some scholars who do not reject the Demiurge as a mythical figure, but nevertheless favor a more literal interpretation. Witness, e.g., Vlastos's remarks. "On one occasion he complains that those who had posited earth, water, air, and fire as the στοιχεῖα of the universe had not penetrated very deeply: what they had taken as the letters of the alphabet of nature should be ranked, he says, not even as low as syllables for this purpose. Here he must have had Empedocles in view, for it was he who had made earth, water, air, and fire the elements of the natural universe, endowing them with absolute, Parmenidean, unalterability to make them qualify for this purpose. So in offering us his own στοιχεῖα Plato shows that he has enrolled in the same program of physical elementarism. Like Empedocles, Anaxagoras, and the atomists, he is undertaking to identify those recurrent elements whose shufflings and reshufflings would explain the lawlike constancies of the flux" ([1975], pp. 67-68). "<An important difference, however, is that the> indivisibles of his physics were still more remote from the bodies of sense-experience: they were not even bodies, but only bounding surfaces of bodies. His atoms are two-dimensional" (p. 69).

24. For further criticism of this "Academic" interpretation, see Vlastos [1939] and [1964].

25. Although Mohr follows Cherniss against Cornford and the traditional translation, his interpretation is very much like Cornford's. He offers a "double aspect" interpretation. "I take the main point of the much debated passage 49b-e to be the establishment of a contrast between phenomena taken,

on the one hand, as being in flux, about which, as the result of their being in flux, nothing whatsoever may be said, and the phenomena taken, on the other hand, as images. As images of Ideas, the phenomena may be said to be phenomena of a certain sort (τοιοῦτον). The development of this double aspect of the phenomena (taken as flux and taken as images of Ideas) is the main point, as I see it, of 47e-52c" ([1978], pp. 99-100).

26. For another attempt to see Plato's remarks in *Timaeus* 49a-50a as a response to his earlier remarks in *Theaetetus* 182c-183b, see Gill [1987].

27. Although Zeyl accepts the traditional translation, he puts forward essentially the same interpretation as the one that Mills put forward in 1968. "What, then, are we to say of those experiences, every day events in the lives of all men, in which we see something becoming now one, now another, of the four? For example, whenever we boil water, we see something which, though it begins as water, becomes by the end of the process air, or at any rate a substance of which air is a major component; and again, when coal or wood is ignited, something which begins as earth, or as predominately earthy, finishes as a flame composed of fire. Confronted with such facts as these we speak of water's becoming air and of earth's becoming fire. But if that which comes to be air were water at the time of its so becoming, it would then be both water and air at once, which has been admitted to be quite impossible.... It thus becomes clear that in any change in which one of the Empedoclean four is perceived as becoming another, the persisting substrate of the change--that which retains its identity throughout, though assuming now this character, now that--cannot itself be any of the Empedoclean four. What, then, is it? ... It is in fact space--not a body or stuff, but the room which bodies are said to occupy" (pp. 156-157). Prior accepts the traditional translation ([1985], pp. 109-100, n. 15 on p. 142), and he puts forward an interpretation that is essentially the same as Mills's and Zeyl's. "The apparent transmutation of the elements--like Plato's claim that they are not 'letters but 'syllables' or worse in the grammar of creation--again reveals the need to find an unchanging, elementary underpinning to serve as the substantial base from which these complex, constantly changing 'elements' can be constructed. This substantial base is the Receptacle" (p. 109). "The Receptacle plays the role of substratum, a subject, a substance, of which entities in the category of Becoming are predicated or to which they are attributed" (p. 113). "<I>t seems fair to characterize the phenomenal images which make up the category of Becoming as accidental properties of the Receptacle" (p. 115). This sort of interpretation seems to go back to Taylor's 1928 commentary on the *Timaeus*. "The 'cyclical' transition of the 'four' familiar bodies into one

another was the standing doctrine of the earlier science, before the criticism of Parmenides had driven home the conviction that what really is cannot merely 'arise from' and 'vanish into' something permanent.... His pluralistic successors have the task laid on them of saying what the 'permanent' which persists through change is. Empedocles had found it in the 'roots' as opposed to their perishable compounds. ... Timaeus also is concerned to find a solution of the problem, but his solution goes deeper than that of Empedocles" (p. 314). "<H>e pronounces against Empedocles' way of facing the problem by simply asserting that the four 'roots' are nature's invariant; they are only passing phases in the life of nature (49d1-3). His way of expressing this is to say that nothing which we see changing its character (ἄλλοτε ἀλλῃ γιγνόμενον, d5) ought to be called 'this' (τοῦτο); it should only be called τοιοῦτον, 'this-like.' We must never use the words 'fire' and the like which would suggest that they are permanent 'things,' i.e., we ought not to use substantives, or pronouns which are equivalent to them, in speaking of γιγνόμενα. We should use only adjectives and adjectival pronouns, as that suggests rightly that what the words stand for is only a 'phase' of something, merely adjectival qualification of the really permanent" (pp. 315-316).

28. Empedocles denies that "mortal things" have "birth" and "death" (DK 31 B 8), and seems to say that although he is content to use the terms, so as to comply with "custom," he does not take himself to be committed to their customary implications (B 9). For some discussion, see Kirk [1983], p. 292.

29. Rowe makes a similar claim. "It is only in this sense that Plato impugns the 'existence' of the world, that is, in the sense that its parts are not securely, fully, genuinely what they claim to be" ([1984], p. 58).

30. The word ὄν is a participle of the verb εἰμί, which means "to be." The word γιγνόμενον is a participle of the verb γίγνομαι, which means "to become."

31. "I am basically in agreement with Professor Frede's conception of the *metaphysical* picture involved in the Platonic distinction between a realm of being and a realm of becoming, and am already on record as endorsing the view that (according to this contrast) the inhabitants of the realm of becoming are *not* endowed with essences, or essential natures, whereas the inhabitants of the realm of being are so endowed. The essence of an F is specified by a definition (that is to say, a correct answer to a 'What is X?' question), and as such a definition applies (strictly speaking) *only* to the form of F-ness, and hence the Form of F-ness is the real F. The many sensible things that we *call* F are not really F, and are called F not because

that is their nature, but rather because they stand in some appropriate relation (participation, or whatever) to the real F. Frede is quite right in pointing out that the many sensible F's merely display the character of an F, without being F essentially, without being F of their own nature" (Code [1988], p. 53; emphasis in original). "Whereas Socrates assumed that the definition of the F applies to all of the F particulars, and that each of those particulars is 'such as' the essence (*οὐσία*) of the F itself, Plato believed that the many F particulars are all *deficient* in being 'such as' the F itself, and that striving to be such, they none the less fall sort (see *Phaedo* 74). This is the famous Platonic separation of the universal" ([1985], pp. 425-426; emphasis in original). "Plato accounts for and explains the application of language to items in the sensible realm in terms of what those items Have (at least in some key cases, in terms of the separable Forms in which they participate), not in terms of what they Are--for there is nothing definable or scientifically knowable that they Are. The Forms, but not the sensible particulars, are endowed with essential natures--the very natures that the Forms are" (p. 427; capitals in 'Are' and 'Have' in original).

32. Cf. *Timaeus* 50c5 and 51b6.

33. Allen makes a similar claim. "Plato's metaphor of imitation brilliantly expresses a community between different orders of objects, different levels of reality.... <It> expresses a fundamental thesis of his ontology, that particulars differ from Forms, as resemblances differ from originals, in degree of reality. For particulars 'fall short' of their Forms, and are 'deficient' with respect to them" ([1960], p. 51). "Particulars and Forms are not merely different types of things; they are types of things which differ in degree of reality, for the one is wholly dependent on the other. Particulars have no independent ontological status; they are purely relational entities, entities which derive their *whole* character and existence from Forms. Because their being is relational, adjectival, dependent..." (p. 57; emphasis in original). Lee also makes a similar claim. "The 'insubstantial image' is not an entity related to a Form; it is a product *of* a relation--perhaps just the *holding* of a relation--between something *else* and the Form" ([1966], p. 365; emphasis in original).

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